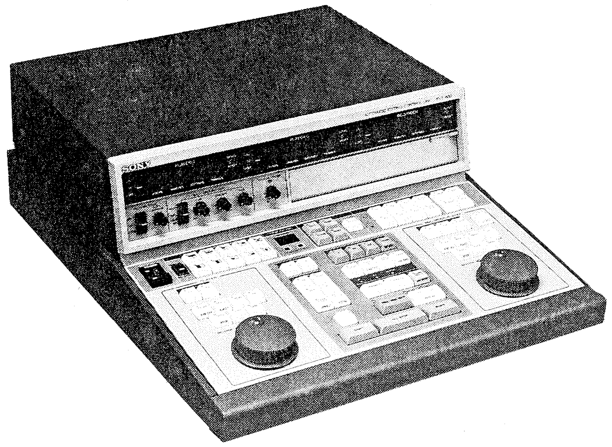
SONY®

EDITING CONTROL UNIT

BVE-600



MAINTENANCE MANUAL

Volume 2 1st Edition (Revised 4)

Serial No. 10001 and Higher (J)

Serial No. 10001 and Higher (UC)

Serial No. 10001 and Higher (EK)

SAFETY CHECK-OUT (US Model)

After correcting the original service problem, perform the following safety check before releasing the set to the customer:

Check the metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 3.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 5.25 V so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

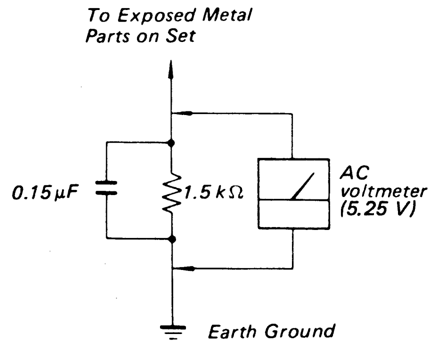


Fig. A. Using an AC voltmeter to check AC leakage.

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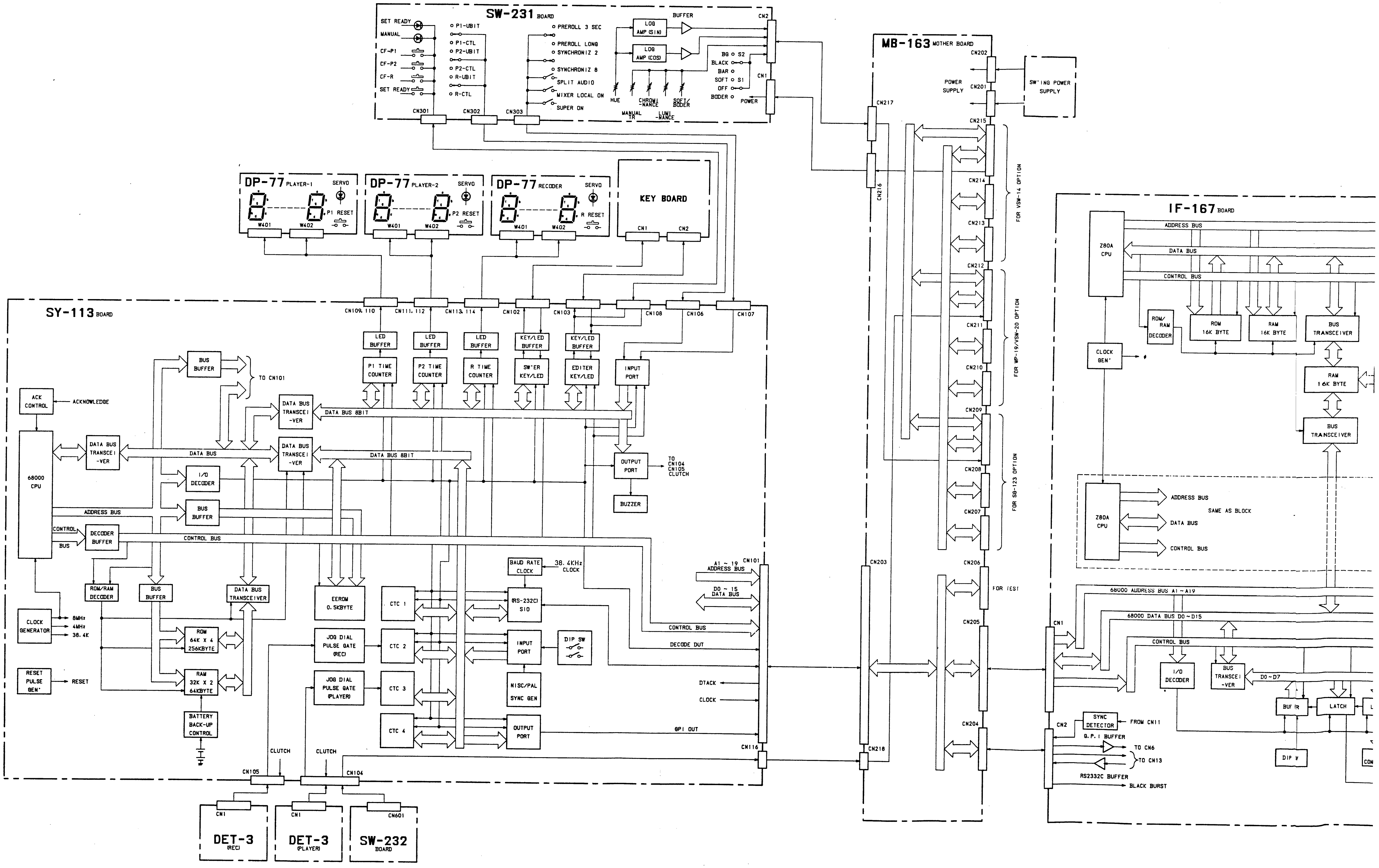
SECTION 5
BLOCK DIAGRAMS

OVERALL


SW-231 BOARD
SET READY
MANUAL
CF-P1
CF-P2
CF-R
SET READY
P1-UBIT
P1-CTL
P2-UBIT
P2-CTL
R-UBIT
R-CTL
PREROLL 3 SEC
PREROLL LONG
SYNCHRONIZ 2
SYNCHRONIZ 8
SPLIT AUDIO
MIXER LOCAL ON
SUPER ON
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LOG AMP (COS)
BUFFER
BG S2
BLACK
BAR
SOFT S1
OFF
BODER
HUE
CHROMI -NANCE
SOFT/ BODER
MANUAL TR
LUMI -NANCE
POWER
CN1
CN2
CN301
CN302
CN303
DP-77 PLAYER-1
DP-77 PLAYER-2
DP-77 RECODER
SERVO
P1 RESET
P2 RESET
R RESET
W401
W402
KEY BOARD
SY-113 BOARD
CN109, 110
CN111, 112
CN113, 114
CN102
CN103
CN108
CN106
CN107
LED BUFFER
KEY/LED BUFFER
P1 TIME COUNTER
P2 TIME COUNTER
R TIME COUNTER
SW'ER KEY/LED
EDITER KEY/LED
INPUT PORT
OUTPUT PORT
TO CN104 CN105 CLUTCH
BUZZER
BUS BUFFER
TO CN101
ACK CONTROL
ACKNOWLEDGE
68000 CPU
DATA BUS TRANSCEI -VER
DATA BUS
DATA BUS 8BIT
I/O DECODER
ADDRESS BUS
CONTROL BUS
DECODER BUFFER
ROM/RAM DECODER
DATA BUS TRANSCEIVER
ROM 64K X 4 256KBYTE
RAM 32K X 2 64KBYTE
BATTERY BACK-UP CONTROL
CLOCK GENERATOR
8MHz
4MHz
38.4K
RESET PULSE GEN'
RESET
EEROM 0.5KBYTE
JOG DIAL PULSE GATE (REC)
JOG DIAL PULSE GATE (PLAYER)
CTC 1
CTC 2
CTC 3
CTC 4
BAUD RATE CLOCK
38.4KHz CLOCK
(RS-232C) SIO
INPUT PORT
DIP SW
NTSC/PAL SYNC GEN
OUTPUT PORT
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D0 ~ 15 DATA BUS
CONTROL BUS
DECODE OUT
DTACK
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GPI OUT
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CLUTCH
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DET-3 (PLAYER)
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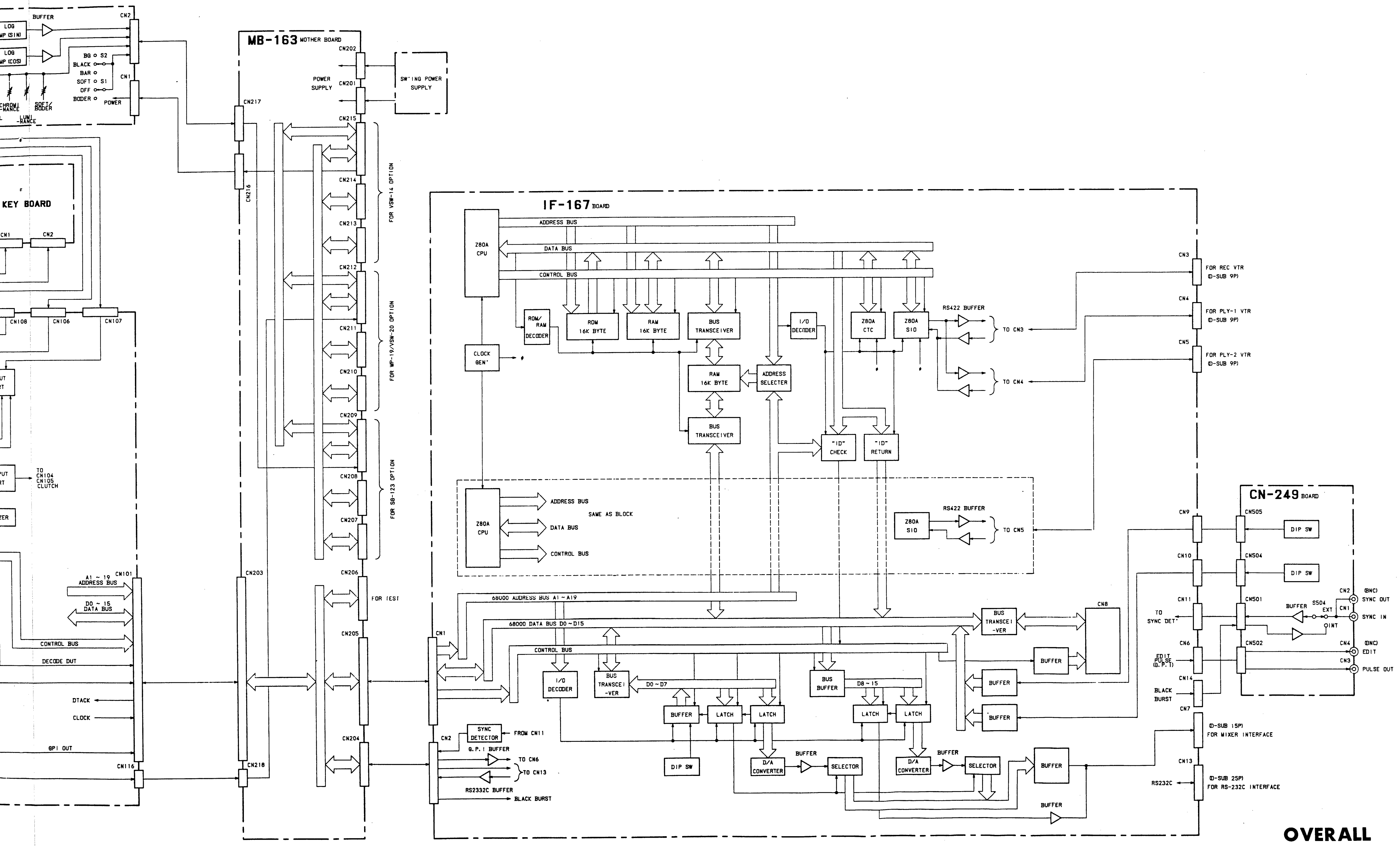
CN208
CN207
CN206
CN205
CN204
CN203
CN218
FOR VSW-14 OPTION
FOR WP-19/VSW-20 OPTION
FOR SG-123 OPTION
FOR TEST
IF-167 BOARD
Z80A CPU
ADDRESS BUS
DATA BUS
CONTROL BUS
ROM/ RAM DECODER
ROM 16K BYTE
BUS TRANSCEIVER
CLOCK GEN'
RAM 16K BYTE
SAME AS BLOCK
68000 ADDRESS BUS A1 ~ A19
68000 DATA BUS D0 ~ D15
I/O DECODER
BUS TRANSCEI -VER
D0 ~ D7
BUF R
LATCH
DIP V
SYNC DETECTOR
FROM CN11
G.P.I BUFFER
TO CN6
TO CN13
RS2332C BUFFER
BLACK BURST


BUFFER
CN2
LOG
MP (SIN)
LOG
MP (COS)
BG
S2
BLACK
BAR
SOFT
S1
OFF
BODER
CN1
POWER
CHROMI
-NANCE
LUMI
-NANCE
SOFT/
BODER
KEY BOARD
CN1
CN2
CN108
CN106
CN107
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CN104
CN105
CLUTCH
CN101
A1 ~ 19
ADDRESS BUS
D0 ~ 15
DATA BUS
CONTROL BUS
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CN116
MB-163 MOTHER BOARD
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POWER
SUPPLY
CN201
SW'ING POWER
SUPPLY
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FOR VSW-14 OPTION
CN212
CN211
CN210
FOR MP-19/VSW-20 OPTION
CN209
CN208
FOR SG-123 OPTION
CN207
CN206
FOR TEST
CN203
CN205
CN204
CN218
IF-167 BOARD
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CPU
ADDRESS BUS
DATA BUS
CONTROL BUS
ROM/
RAM
DECODER
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16K BYTE
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16K BYTE
BUS
TRANSCEIVER
I/O
DECODER
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SIO
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TO CN3
TO CN4
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GEN'
RAM
16K BYTE
ADDRESS
SELECTER
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TRANSCEIVER
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"ID"
RETURN
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SAME AS BLOCK
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CONTROL BUS
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68000 ADDRESS BUS A1 ~ A19
68000 DATA BUS D0 ~ D15
CONTROL BUS
I/O
DECODER
BUS
TRANSCEI
-VER
D0 ~ D7
BUFFER
LATCH
LATCH
BUS
BUFFER
D8 ~ 15
LATCH
LATCH
BUS
TRANSCEI
-VER
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BUFFER
BUFFER
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SELECTOR
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SELECTOR
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CN4
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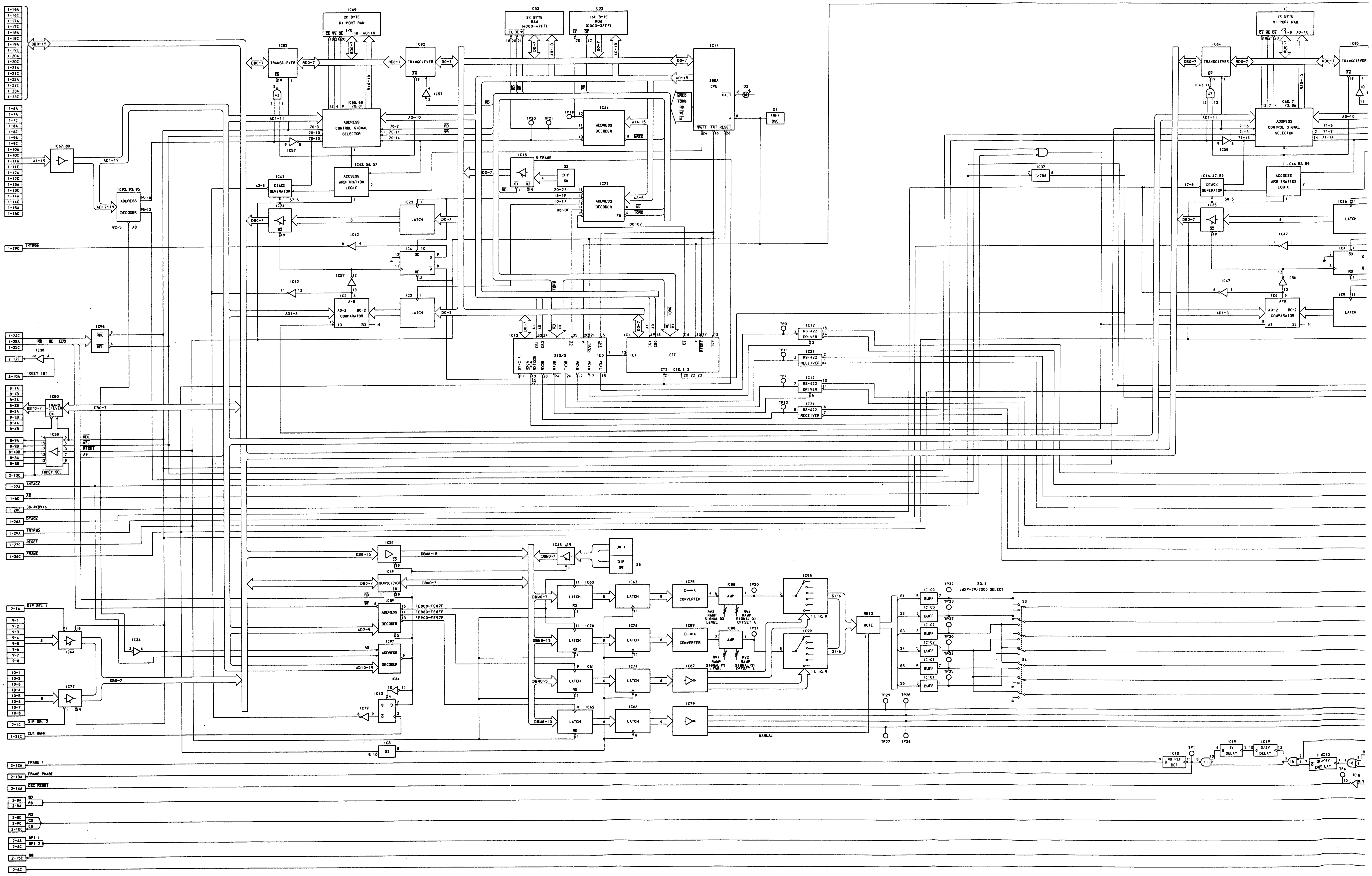
OVERALL
BVE-600(1)

VTR/MIXER INTERFACE


IC69
2K BYTE
BI-PORT RAM
IC33
2K BYTE
RAM
(4000-47FF)
IC32
16K BYTE
ROM
(0000-3FFF)
IC14
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1-17C
1-18A
1-18C
1-19A
1-19C
1-20A
1-20C
1-21A
1-21C
1-22A
1-22C
1-23A
1-23C
DB0-15
1-6A
1-7A
1-7C
1-8A
1-8C
1-9A
1-9C
1-10A
1-10C
1-11A
1-11C
1-12A
1-12C
1-13A
1-13C
1-14A
1-14C
1-15A
1-15C
A1-19
1-29C
INTRQ6
1-24C
1-25A
1-25C
2-12C
8-10A
8-1A
8-1B
8-2A
8-2B
8-3A
8-3B
8-4A
8-4B
8-9A
8-9B
8-10B
8-8A
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1-27A
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1-6C
AS
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9-3
9-4
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9-7
9-8
10-1
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10-3
10-4
10-5
10-6
10-7
10-8
2-1C
DIP SEL 2
1-31C
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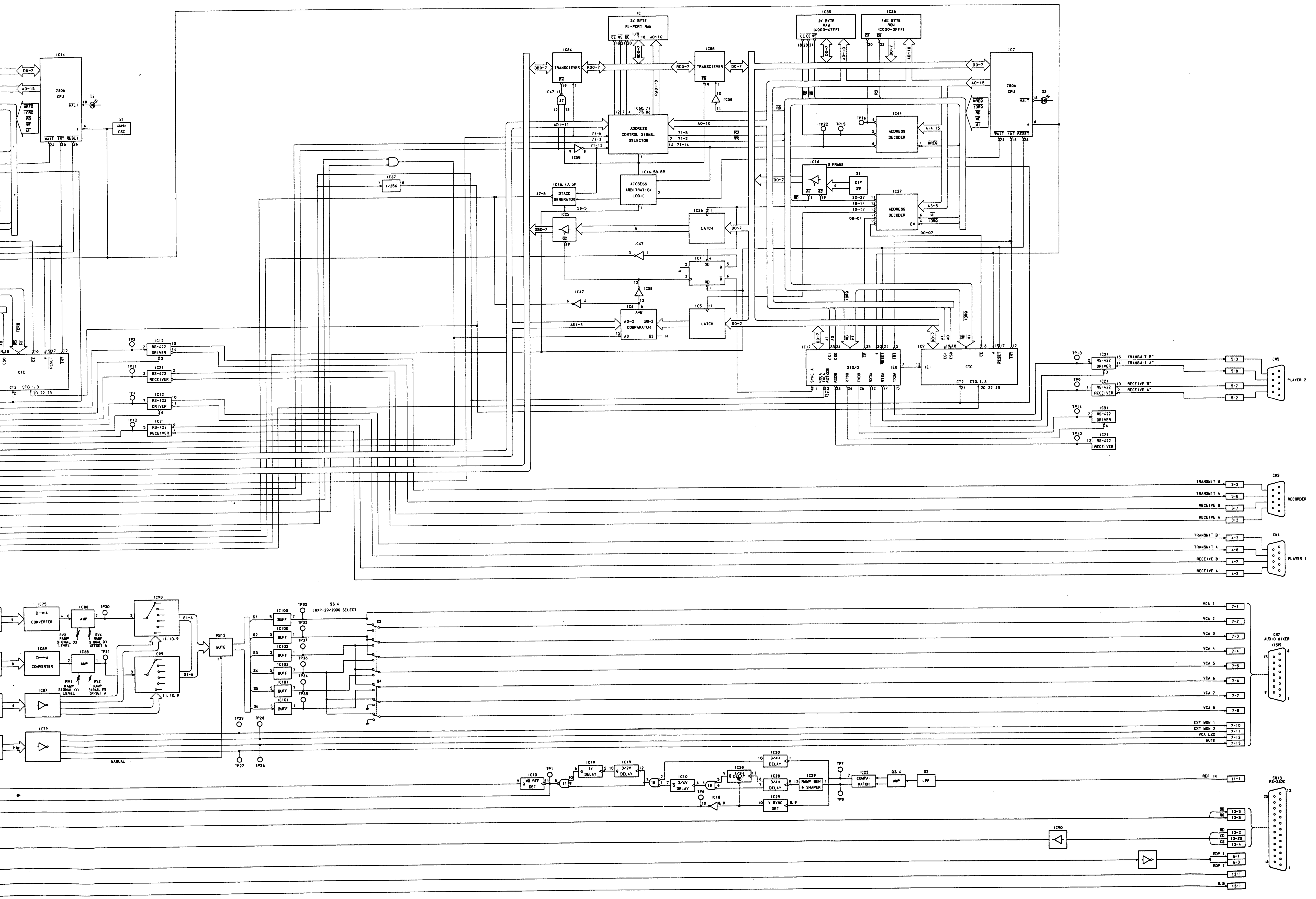
2-13A
FRAME PHASE
2-14A
OSC RESET
2-8A
SD
2-9A
RS
2-8C
RD
2-9C
CD
2-10C
CS
2-4A
BPI 1
2-4C
BPI 2
2-15C
SB
2-6C


IC14
Z80A CPU
HALT
WAIT INT RESET
X1 4MHz OSC
D2
CTC
IC1 2K BYTE BI-PORT RAM
IC84 TRANSCEIVER
IC85 TRANSCEIVER
ADDRESS CONTROL SIGNAL SELECTOR
ACCESS ARBITRATION LOGIC
DTACK GENERATOR
IC37 1/256
IC35 2K BYTE RAM (4000-47FF)
IC36 16K BYTE ROM (C000-3FFF)
IC7 Z80A CPU
D3
IC44 ADDRESS DECODER
IC16 B FRAME
S1 DIP SW
IC27 ADDRESS DECODER
IC26 LATCH
IC5 LATCH
IC6 A=B COMPARATOR
IC17 SIO/O
IC9 CTC
RS-422 DRIVER
RS-422 RECEIVER
TRANSMIT B"
TRANSMIT A"
RECEIVE B"
RECEIVE A"
CN5 PLAYER 2
TRANSMIT B
TRANSMIT A
RECEIVE B
RECEIVE A
CN3 RECORDER
TRANSMIT B'
TRANSMIT A'
RECEIVE B'
RECEIVE A'
CN4 PLAYER 1
IC75 D→A CONVERTER
IC88 AMP
IC89 D→A CONVERTER
RV3 RAMP SIGNAL (B) LEVEL
RV4 RAMP SIGNAL (B) OFFSET A
RV1 RAMP SIGNAL (A) LEVEL
RV2 RAMP SIGNAL (A) OFFSET A
IC87
IC79
MANUAL
IC98
IC99
RB13 MUTE
IC100 BUFF
IC102 BUFF
IC101 BUFF
S3, 4 (MXP-29/2000 SELECT)
VCA 1
VCA 2
VCA 3
VCA 4
VCA 5
VCA 6
VCA 7
VCA 8
EXT MON 1
EXT MON 2
VCA LKD
MUTE
CN7 AUDIO MIXER (15P)
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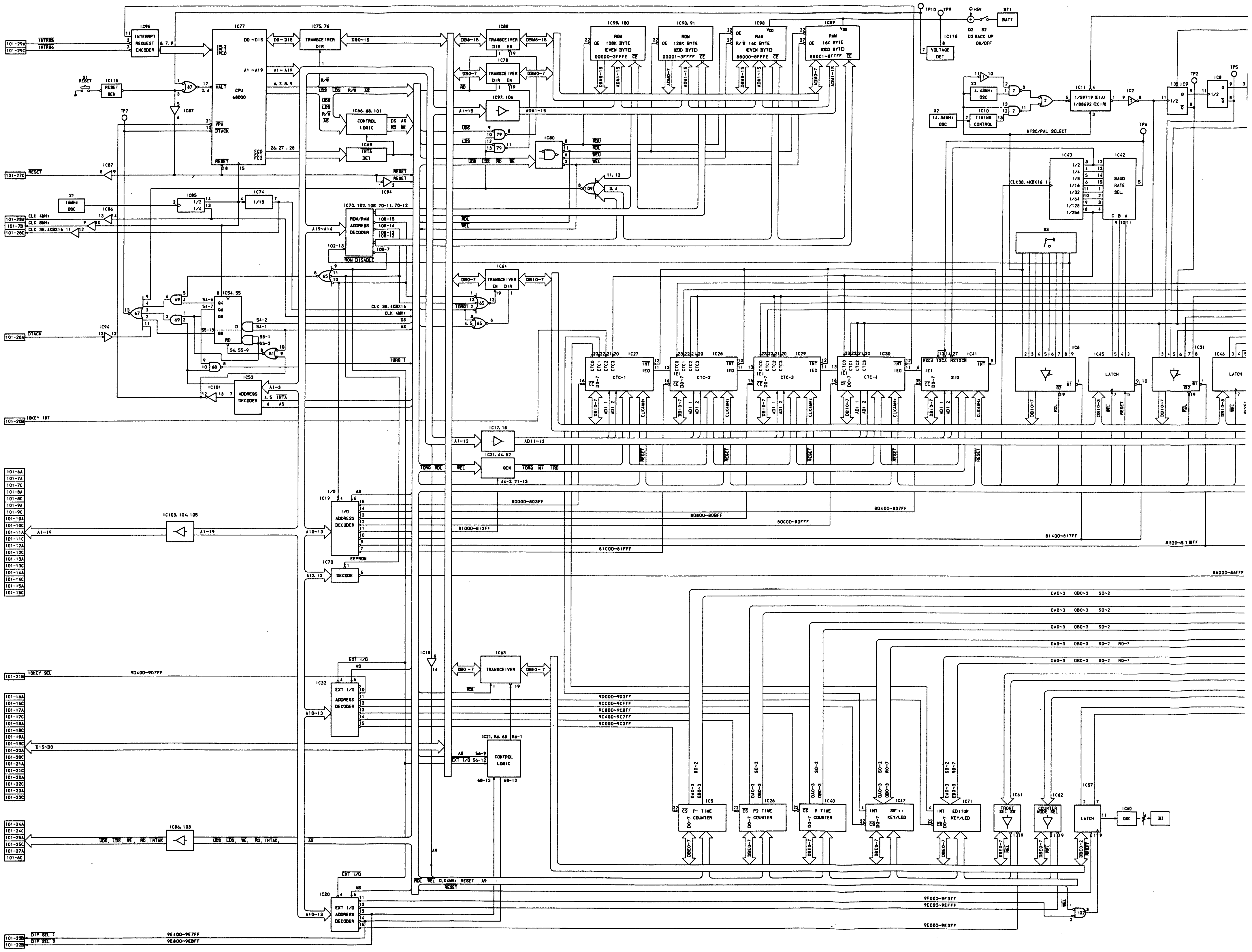
IC19 1V DELAY
IC19 3/2V DELAY
IC10 3/4V DELAY
IC28 1/2H DELAY
IC30 3/4H DELAY
IC28 3/4H DELAY
IC29 RAMP GEN & SHAPER
IC29 V SYNC DET
IC23 COMPARATOR
Q3, 4 AMP
Q2 LPF
REF IN
CN13 RS-232C
IC90
RD
RS
SD
CD
CS
EDP 1
EDP 2
S.B

IF-167

BVE-600(I)

SYTEM CONTROL


IC96 INTERRUPT REQUEST ENCODER
IC77 CPU 68000
IC75, 76 TRANSCEIVER DIR
IC88 TRANSCEIVER DIR EN
IC78 TRANSCEIVER DIR EN
IC99, 100 ROM 128K BYTE (EVEN BYTE) 00000-3FFFE
IC90, 91 ROM 128K BYTE (ODD BYTE) 00001-3FFFF
IC98 RAM 16K BYTE (EVEN BYTE) 88000-8FFFE
IC89 RAM 16K BYTE (ODD BYTE) 88001-8FFFF
BT1 BATT
IC116 VOLTAGE DET
D2 S2 D3 BACK UP ON/OFF
X3 4.43MHz OSC
X2 14.34MHz OSC
IC10 TIMING CONTROL
IC11 1/59719 (E(A)) 1/88692 (C(R))
NTSC/PAL SELECT
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IC54, 55
IC101
IC53 ADDRESS DECODER
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IC42 BAUD RATE SEL
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IC27 CTC-1
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IC30 CTC-4
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IC45 LATCH
IC31
IC46 LATCH
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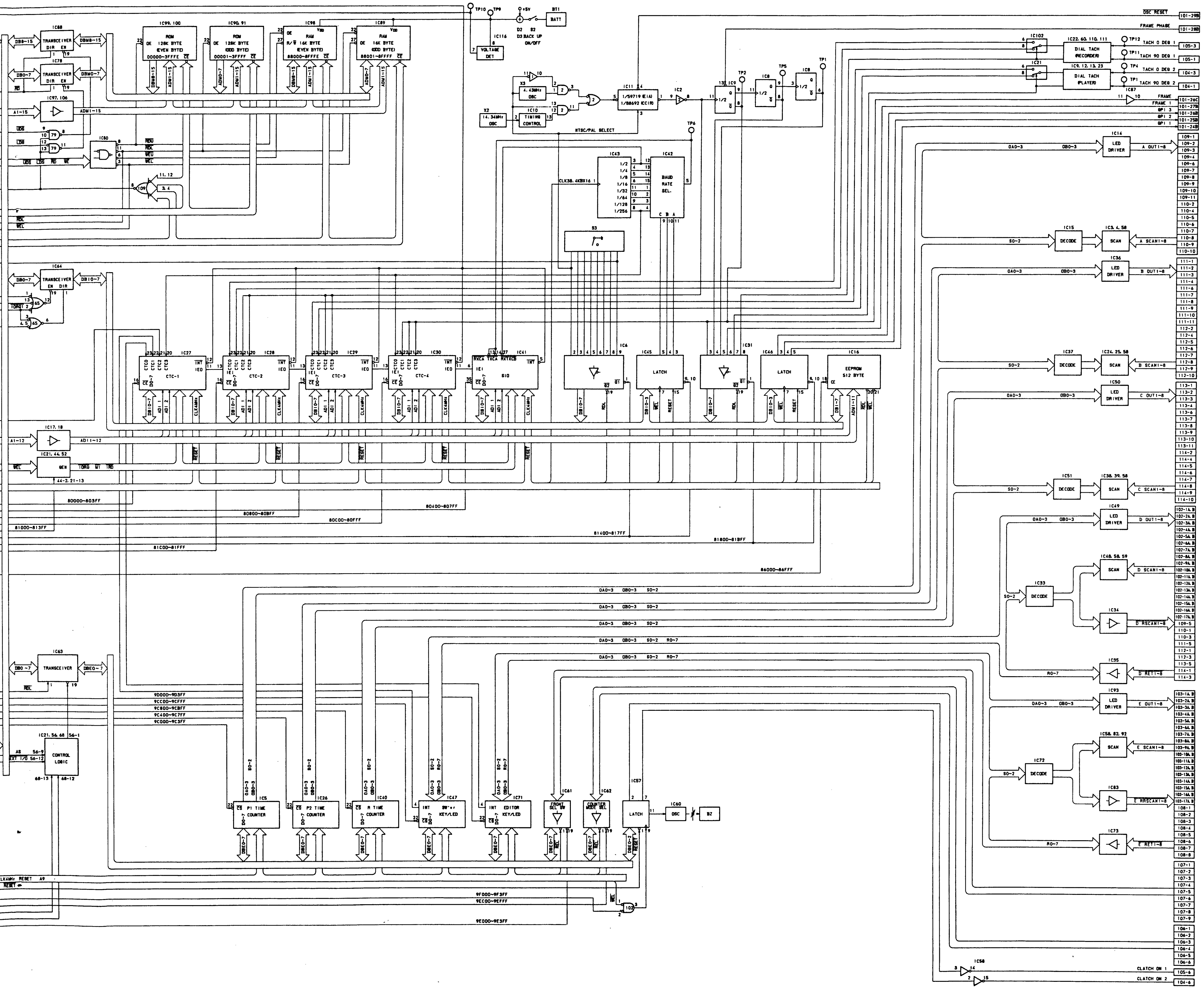
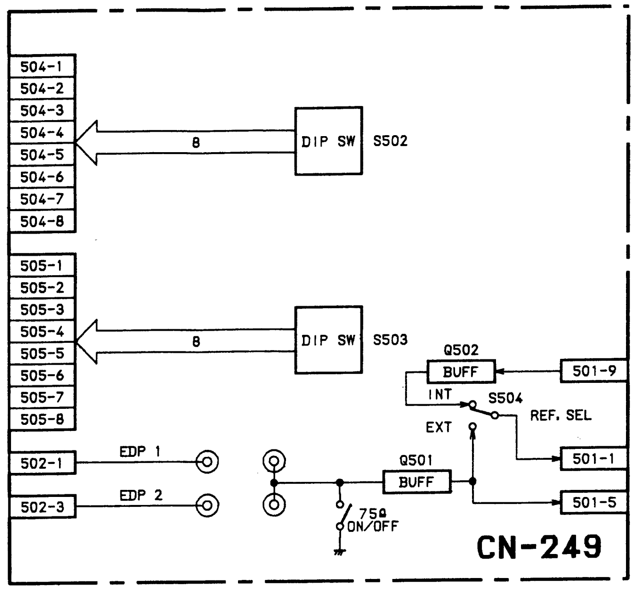
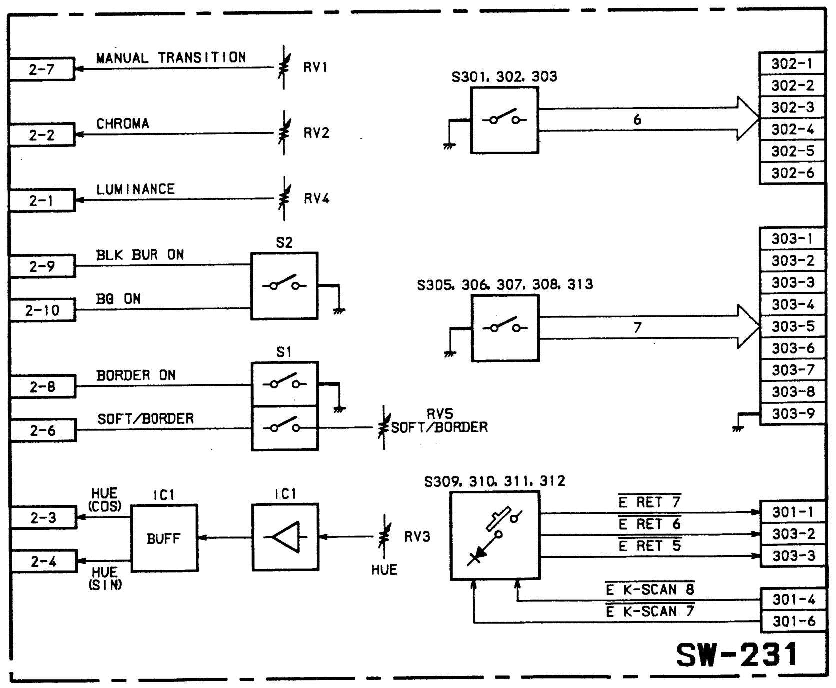
IC26 P2 TIME COUNTER
IC40 R TIME COUNTER
IC47 SW+ KEY/LED
IC71 EDITOR KEY/LED
IC61
IC62
IC57 LATCH
IC60 OSC
80000-803FF
80400-807FF
80800-80BFF
80C00-80FFF
81000-813FF
81400-817FF
81800-81BFF
81C00-81FFF
86000-86FFF
9D400-9D7FF
9D000-9D3FF
9CC00-9CFFF
9C800-9CBFF
9C400-9C7FF
9C000-9C3FF
9F000-9F3FF
9EC00-9EFFF
9E000-9E3FF
9E400-9E7FF
9E800-9EBFF
IOKEY INT
IOKEY SEL
DIP SEL 1
DIP SEL 2
A1-19
D15-D0

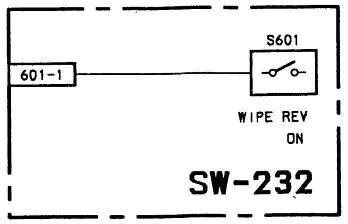

ROM 128K BYTE (EVEN BYTE) 00000-3FFFF
ROM 128K BYTE (ODD BYTE) 00001-3FFFF
RAM 16K BYTE (EVEN BYTE) 88000-8FFFE
RAM 16K BYTE (ODD BYTE) 88001-8FFFF
TRANSCEIVER
VOLTAGE DET
D3 BACK UP ON/OFF
BATT
OSC
TIMING CONTROL
NTSC/PAL SELECT
BAUD RATE SEL.
DIAL TACH (RECORDER)
DIAL TACH (PLAYER)
TACH 0 DEG
TACH 90 DEG
FRAME PHASE
CTC-1
CTC-2
CTC-3
CTC-4
SIO
LATCH
EEPROM 512 BYTE
LED DRIVER
DECODE
SCAN
CONTROL LOGIC
P1 TIME COUNTER
P2 TIME COUNTER
R TIME COUNTER
KEY/LED
EDITOR KEY/LED
BZ
CLATCH ON 1
CLATCH ON 2

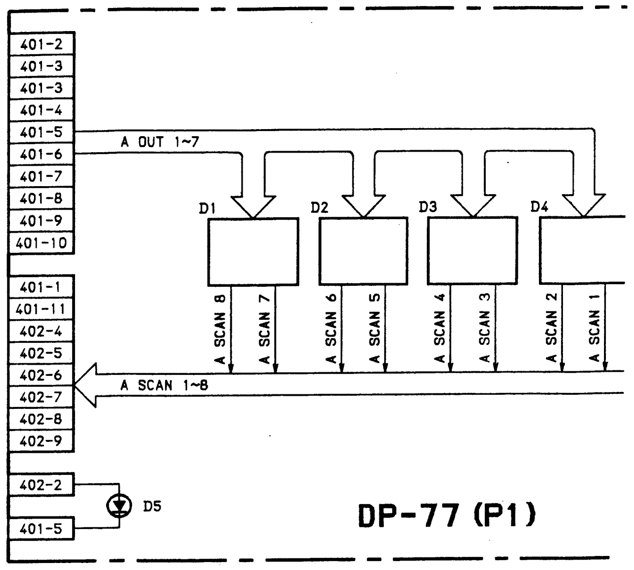
SY-113
BVE-600(I)

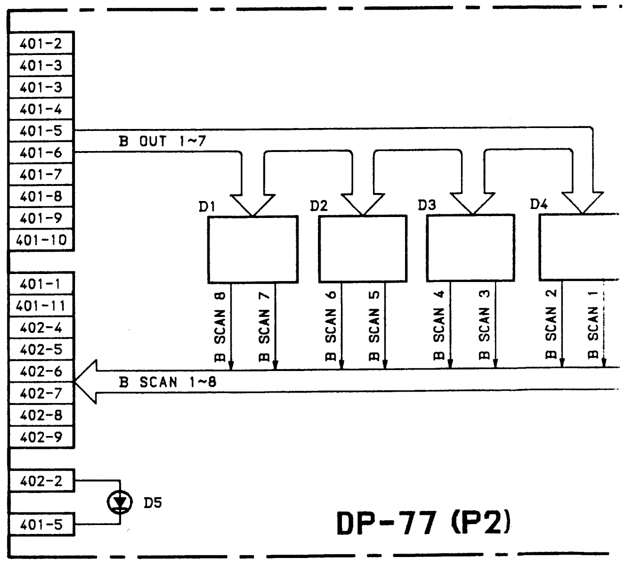
CONNECTOR BOARD
VR/SWITCH SELECT
SWITCH
TIME COUNTER DISPLAY

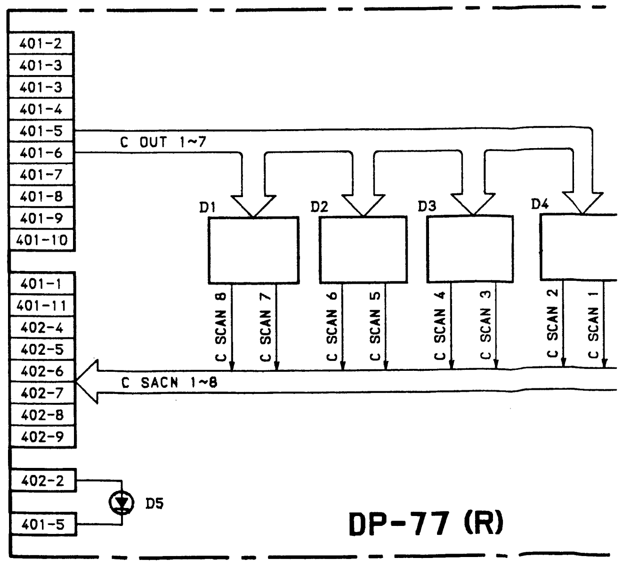

504-1
504-2
504-3
504-4
504-5
504-6
504-7
504-8
8
DIP SW
S502
505-1
505-2
505-3
505-4
505-5
505-6
505-7
505-8
8
DIP SW
S503
Q502
BUFF
501-9
INT
S504
REF. SEL
EXT
501-1
502-1
EDP 1
Q501
BUFF
502-3
EDP 2
501-5
75Ω
ON/OFF
CN-249

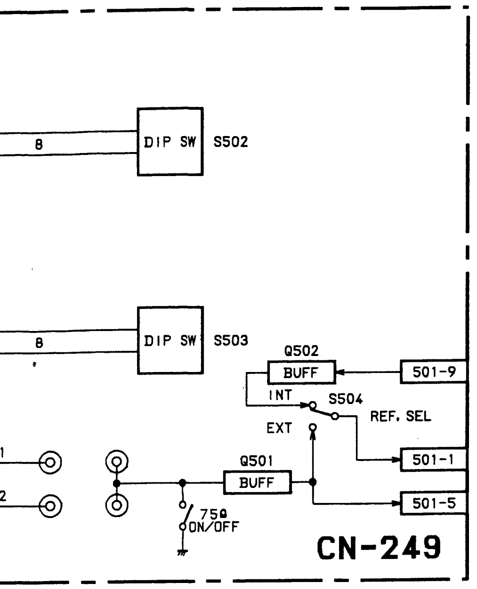

2-7
MANUAL TRANSITION
RV1
2-2
CHROMA
RV2
2-1
LUMINANCE
RV4
S301, 302, 303
6
302-1
302-2
302-3
302-4
302-5
302-6
S2
2-9
BLK BUR ON
2-10
BG ON
S305, 306, 307, 308, 313
7
303-1
303-2
303-3
303-4
303-5
303-6
303-7
303-8
303-9
S1
2-8
BORDER ON
2-6
SOFT/BORDER
RV5
SOFT/BORDER
S309, 310, 311, 312
E RET 7
E RET 6
E RET 5
301-1
303-2
303-3
2-3
HUE (COS)
IC1
BUFF
IC1
RV3
HUE
2-4
HUE (SIN)
E K-SCAN 8
E K-SCAN 7
301-4
301-6
SW-231

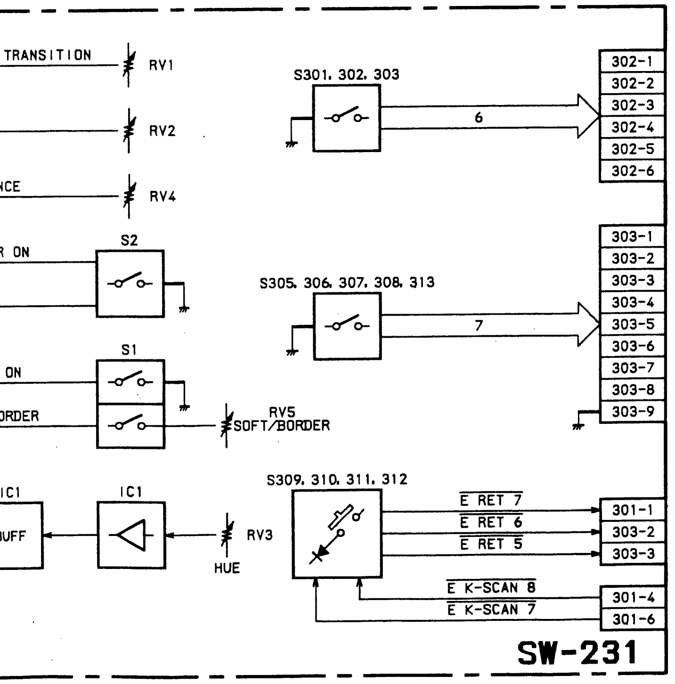

601-1
S601
WIPE REV
ON
SW-232

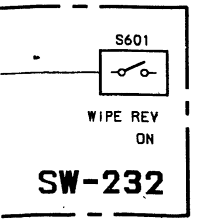

401-2
401-3
401-3
401-4
401-5
401-6
401-7
401-8
401-9
401-10
A OUT 1~7
D1
D2
D3
D4
401-1
401-11
402-4
402-5
402-6
402-7
402-8
402-9
A SCAN 8
A SCAN 7
A SCAN 6
A SCAN 5
A SCAN 4
A SCAN 3
A SCAN 2
A SCAN 1
A SCAN 1~8
402-2
D5
401-5
DP-77 (P1)

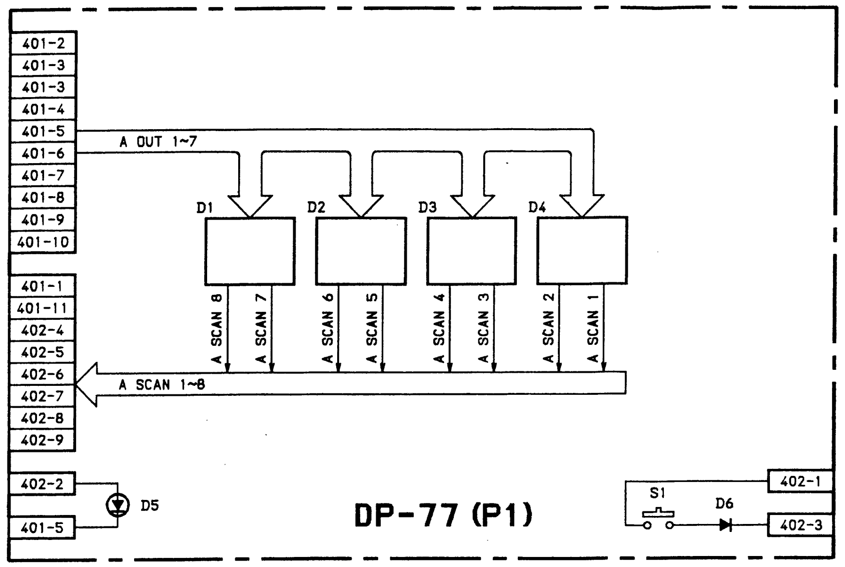

401-2
401-3
401-3
401-4
401-5
401-6
401-7
401-8
401-9
401-10
B OUT 1~7
D1
D2
D3
D4
401-1
401-11
402-4
402-5
402-6
402-7
402-8
402-9
B SCAN 8
B SCAN 7
B SCAN 6
B SCAN 5
B SCAN 4
B SCAN 3
B SCAN 2
B SCAN 1
B SCAN 1~8
402-2
D5
401-5
DP-77 (P2)

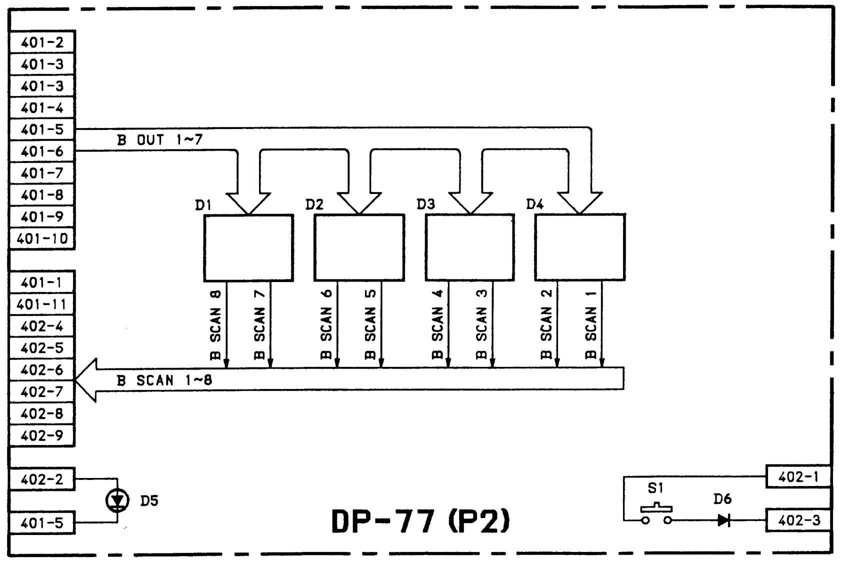

401-2
401-3
401-3
401-4
401-5
401-6
401-7
401-8
401-9
401-10
C OUT 1~7
D1
D2
D3
D4
401-1
401-11
402-4
402-5
402-6
402-7
402-8
402-9
C SCAN 8
C SCAN 7
C SCAN 6
C SCAN 5
C SCAN 4
C SCAN 3
C SCAN 2
C SCAN 1
C SACN 1~8
402-2
D5
401-5
DP-77 (R)

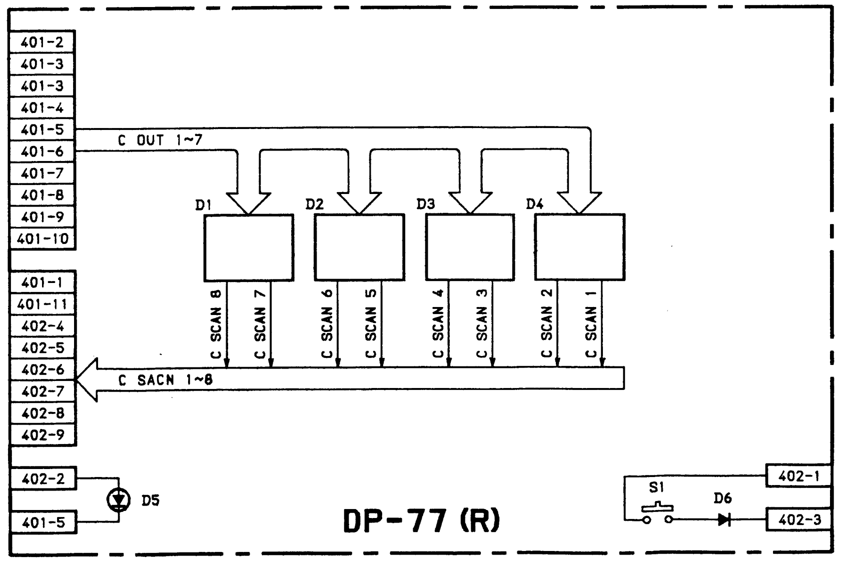

8
DIP SW
S502
8
DIP SW
S503
Q502
BUFF
501-9
INT
S504
REF. SEL
EXT
501-1
Q501
BUFF
501-5
75Ω
ON/OFF
CN-249


TRANSITION
RV1
RV2
RV4
S2
S1
RV5
SOFT/BORDER
IC1
IC1
UFF
RV3
HUE
S301, 302, 303
6
302-1
302-2
302-3
302-4
302-5
302-6
S305, 306, 307, 308, 313
7
303-1
303-2
303-3
303-4
303-5
303-6
303-7
303-8
303-9
S309, 310, 311, 312
E RET 7
E RET 6
E RET 5
E K-SCAN 8
E K-SCAN 7
301-1
303-2
303-3
301-4
301-6
SW-231


S601
WIPE REV
ON
SW-232

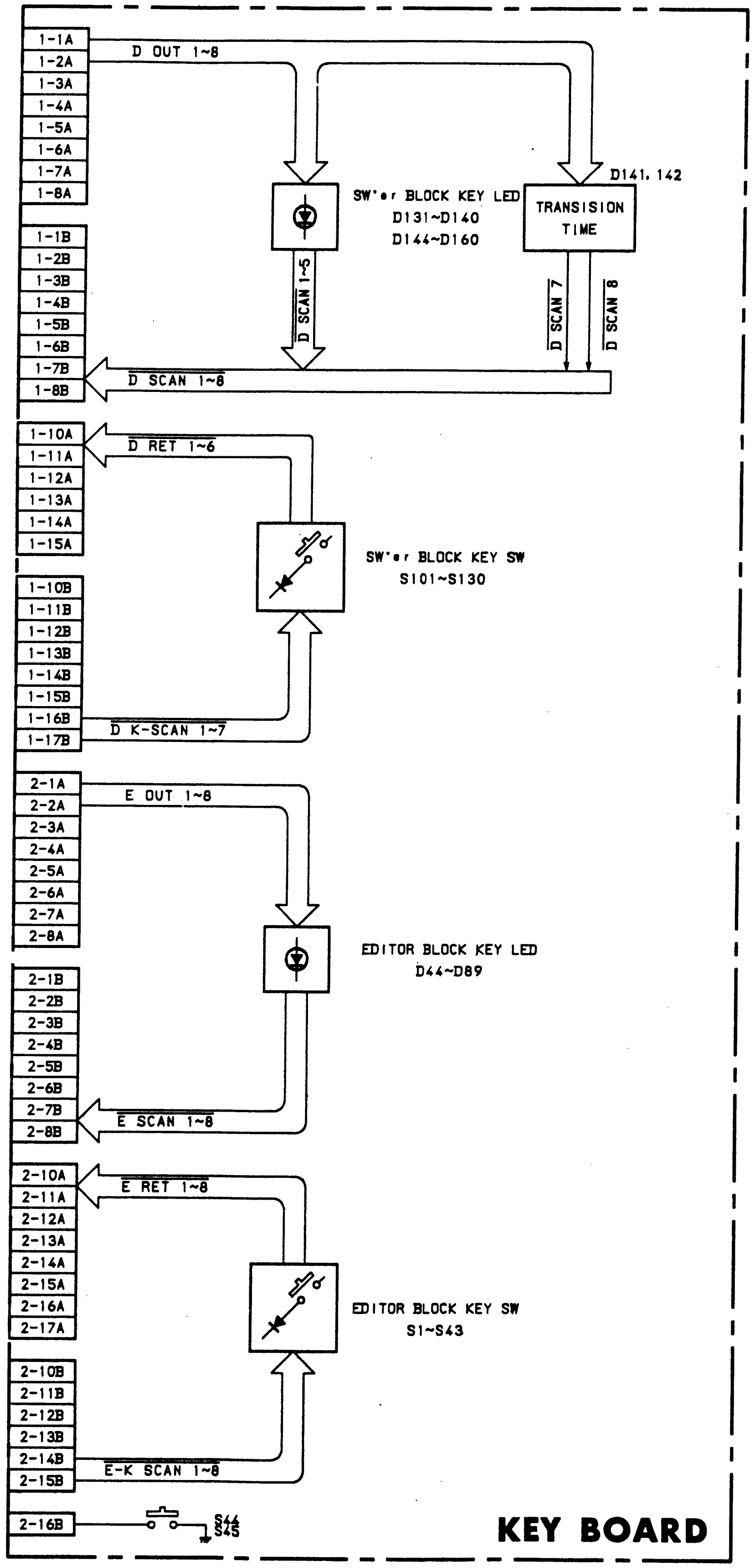

401-2
401-3
401-3
401-4
401-5
401-6
401-7
401-8
401-9
401-10
401-1
401-11
402-4
402-5
402-6
402-7
402-8
402-9
402-2
401-5
A OUT 1~7
D1
D2
D3
D4
A SCAN 8
A SCAN 7
A SCAN 6
A SCAN 5
A SCAN 4
A SCAN 3
A SCAN 2
A SCAN 1
A SCAN 1~8
D5
DP-77 (P1)
S1
D6
402-1
402-3

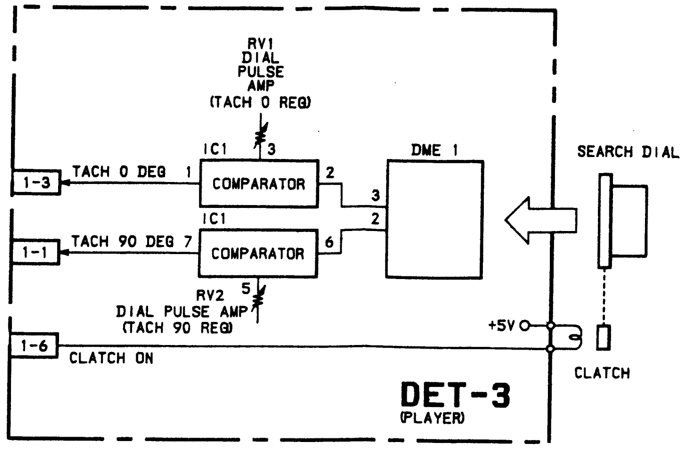

401-2
401-3
401-3
401-4
401-5
401-6
401-7
401-8
401-9
401-10
401-1
401-11
402-4
402-5
402-6
402-7
402-8
402-9
402-2
401-5
B OUT 1~7
D1
D2
D3
D4
B SCAN 8
B SCAN 7
B SCAN 6
B SCAN 5
B SCAN 4
B SCAN 3
B SCAN 2
B SCAN 1
B SCAN 1~8
D5
DP-77 (P2)
S1
D6
402-1
402-3

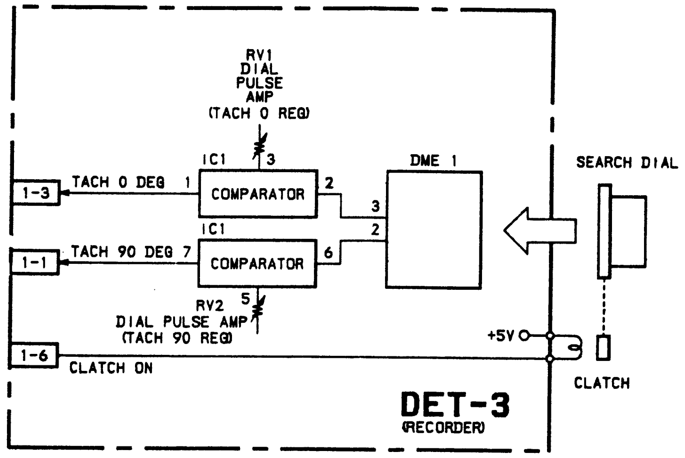

401-2
401-3
401-3
401-4
401-5
401-6
401-7
401-8
401-9
401-10
401-1
401-11
402-4
402-5
402-6
402-7
402-8
402-9
402-2
401-5
C OUT 1~7
D1
D2
D3
D4
C SCAN 8
C SCAN 7
C SCAN 6
C SCAN 5
C SCAN 4
C SCAN 3
C SCAN 2
C SCAN 1
C SACN 1~8
D5
DP-77 (R)
S1
D6
402-1
402-3

CN-249
SW-231
SW-232
DP-77
BVE-600(1)

KEY BOARD
SEARCH DIAL DETECTOR


1-1A
1-2A
1-3A
1-4A
1-5A
1-6A
1-7A
1-8A
D OUT 1~8
SW'er BLOCK KEY LED
D131~D140
D144~D160
TRANSISION TIME
D141, 142
D SCAN 1~5
D SCAN 7
D SCAN 8
1-1B
1-2B
1-3B
1-4B
1-5B
1-6B
1-7B
1-8B
D SCAN 1~8
1-10A
1-11A
1-12A
1-13A
1-14A
1-15A
D RET 1~6
SW'er BLOCK KEY SW
S101~S130
1-10B
1-11B
1-12B
1-13B
1-14B
1-15B
1-16B
1-17B
D K-SCAN 1~7
2-1A
2-2A
2-3A
2-4A
2-5A
2-6A
2-7A
2-8A
E OUT 1~8
EDITOR BLOCK KEY LED
D44~D89
2-1B
2-2B
2-3B
2-4B
2-5B
2-6B
2-7B
2-8B
E SCAN 1~8
2-10A
2-11A
2-12A
2-13A
2-14A
2-15A
2-16A
2-17A
E RET 1~8
EDITOR BLOCK KEY SW
S1~S43
2-10B
2-11B
2-12B
2-13B
2-14B
2-15B
E-K SCAN 1~8
2-16B
S44
S45
KEY BOARD


RV1
DIAL PULSE AMP
(TACH 0 REG)
IC1
COMPARATOR
1-3
TACH 0 DEG
1
3
2
IC1
COMPARATOR
1-1
TACH 90 DEG 7
6
5
RV2
DIAL PULSE AMP
(TACH 90 REG)
DME 1
3
2
SEARCH DIAL
+5V
1-6
CLATCH ON
CLATCH
DET-3
(PLAYER)


RV1
DIAL PULSE AMP
(TACH 0 REG)
IC1
COMPARATOR
1-3
TACH 0 DEG
1
3
2
IC1
COMPARATOR
1-1
TACH 90 DEG 7
6
5
RV2
DIAL PULSE AMP
(TACH 90 REG)
DME 1
3
2
SEARCH DIAL
+5V
1-6
CLATCH ON
CLATCH
DET-3
(RECORDER)

KEY BOARD
DET-3
BVE-600(1)

SECTION 6
SEMICONDUCTOR ELECTRODES

ここに記載されている IC, トランジスタ, ダイオードは, それぞれの機能を等価的に表わしたものです。したがって互換性を表わすものではありません。(互換性のない型名が併記されている事もあります。)部品の交換をする時は, SPARE PARTS の章を参照して下さい。

ICs, transistors and diodes whoses functions are equivalent are described here. Therefore, incompatible device names may be described together. For parts replacement, refer to the Spare Parts section in this manual.

IC	PAGE
AM26LS30PC	6-2
AM26LS32PC	6-2
CXK5816PN-12L	6-14
DMEDM-211	6-2
HD14538BP	6-2
ICL7665SCPA	6-2
LH0080A	6-3
LH0082AD	6-3
LH0084A	6-4
M54519P	6-4
M54529AP	6-4
M54562P	6-4
M58478P	6-5
MC68000P8	6-5
MC74HC164N	6-5
MC74HC174N	6-5
MC74HC540N	6-6
MC74HC541N	6-6
MSM5128-12RS	6-6
NJM2903D	6-6
NJM4558D	6-6
NJM7812B	6-6
NJM78L09A	6-6
NJM78L12A	6-6
NJM79L09A	6-7
NJM79L12A	6-7
SN7407N	6-7
SN75150P	6-7
SN75189AN	6-7
SN74ALS138N	6-8
SN74ALS245AN	6-8
SN74HC03N	6-8
SN74HC06N	6-8

IC	PAGE
TC4001BP	6-8
TC4011BP	6-8
TC4030BP	6-8
TC4051BPHB	6-8
TC4069UBP	6-8
TC5020BP	6-8
TC74HC00P	6-8
TC74HC02P	6-9
TC74HC04P	6-9
TC74HC08P	6-9
TC74HC10P	6-9
TC74HC11P	6-9
TC74HC133P	6-9
TC74HC138P	6-9
TC74HC139P	6-9
TC74HC14P	6-10
TC74HC147P	6-10
TC74HC151P	6-10
TC74HC157P	6-10
TC74HC163P	6-10
TC74HC173P	6-11
TC74HC175P	6-11
TC74HC193P	6-11
TC74HC20P	6-11
TC74HC238P	6-12
TC74HC245P	6-12
TC74HC273P	6-12
TC74HC27P	6-12
TC74HC30P	6-12
TC74HC32P	6-12
TC74HC367P	6-12
TC74HC393P	6-13
TC74HC4078P	6-12
TC74HC574P	6-13
TC74HC85P	6-13
TC74HC86P	6-13
TD62901P	6-13
TMP82C79P-2	6-14
TL084CN	6-15
TL7705CP-B	6-5
UPC393C	6-6

IC	PAGE
μPD43256AC-12L	6-5
μPD4030BC	6-8
μPD4051BC	6-9
X2804AP	6-15

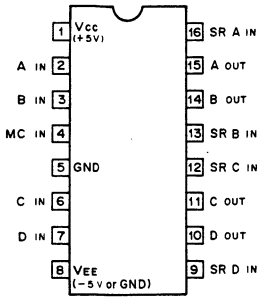
TRANSISTOR	PAGE
2SA1175F	6-15
2SC2785E	6-15
2SC2785F	6-15
2SD774-4	6-15

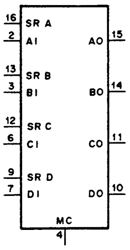
DIODE	PAGE
1SS119	6-15
EBR5534S	6-15
ERB81-004	6-15
LB402VK	6-15
PY5504S-1	6-15
SEL1810A	6-15
SL-1172-C	6-15
SLP281C-50	6-15
SLR-54MC3	6-15
TLY113AP	6-15

等価回路は IC メーカーの Data Book に従いました。

The circuit diagram of each IC is obtained from the IC data book published by the manufacturer.

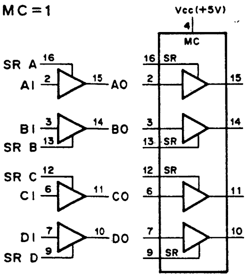
AM26LS30PC (ADVANCED MICRO DEVICES)
LINE DRIVER
— TOP VIEW —


1 Vcc (+5V)
A IN 2
B IN 3
MC IN 4
5 GND
C IN 6
D IN 7
8 VEE (−5 V or GND)
16 SR A IN
15 A OUT
14 B OUT
13 SR B IN
12 SR C IN
11 C OUT
10 D OUT
9 SR D IN


SR A
AI
AO
SR B
BI
BO
SR C
CI
CO
SR D
DI
DO
MC

MC ; MODE CONTROL
SR ; SLEW RATE CONTROL

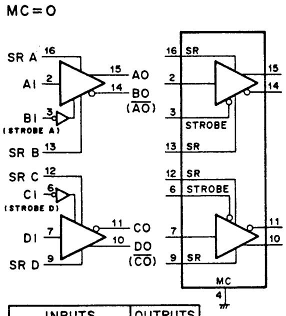
MC=1


Vcc(+5V)
MC
SR A
AI
AO
BI
BO
SR B
SR C
CI
CO
DI
DO
SR D
SR

INPUTS		OUTPUTS
MC	A TO D	A TO D
1	0	0
1	1	1

0 ; LOW LEVEL
1 ; HIGH LEVEL

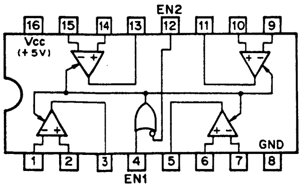
MC=0


SR A
AI
AO
BO
(AO)
BI
(STROBE A)
SR B
SR C
CI
(STROBE D)
CO
DI
DO
(CO)
SR D
SR
STROBE
MC

INPUTS			OUTPUTS	
MC	STROBE	A & D	A & D	B & C
0	0	0	0	1
0	0	1	1	0
0	1	X	HI-Z	HI-Z

X;DON'T CARE
HI-Z;HIGH IMPEDANCE

AM26LS33PC (ADVANCED MICRO DEVICES)
HIGH SPEED DIFFERENTIAL LINE RECEIVER
— TOP VIEW —

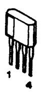

EN2
Vcc (+5V)
GND
EN1
16
15
14
13
12
11
10
9
1
2
3
4
5
6
7
8

FUNCTION TABLE

EN2	EN1	OUTPUT
0	0	ENABLE
0	1	ENABLE
1	0	HI-Z
1	1	ENABLE

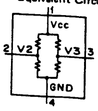
0; LOW LEVEL
1; HIGH LEVEL
HI-Z ; HIGH IMPEDANCE

	SENSE	INPUT VOLT
LS32	±200mV	±7V
LS33	±500mV	±15V

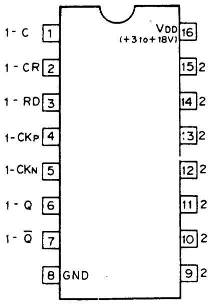


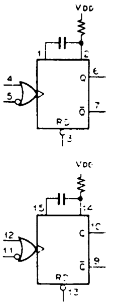
DMEDM-211

Magneto-Sensing Element
— Equivalent Circuit —


1
Vcc
2
V2
V3
3
GND
4

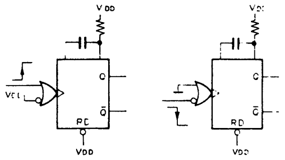
HD14538BP (HITACHI)
C-MOS DUAL RETRIGGERABLE/NON-RETRIGGERABLE MONOSTABLE MULTIVIBRATOR
— TOP VIEW —


1-C 1
1-CR 2
1-RD 3
1-CKP 4
1-CKN 5
1-Q 6
1-Q̄ 7
8 GND
VDD (+3 to +18V) 16
15 2-C
14 2-CR
13 2-RD
12 2-CKP
11 2-CKN
10 2-Q
9 2-Q̄

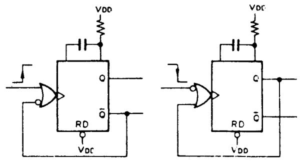

VDD
Q
Q̄
RD
VDD
Q
Q̄
RD

RETRIGGERABLE M.M.V

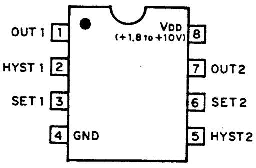
OUTPUT PULSE WIDTH=CR

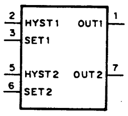

VDD
Q
Q̄
RD
VDD
VDD
Q
Q̄
RD
VDD

NON-RETRIGGERABLE M.M.V

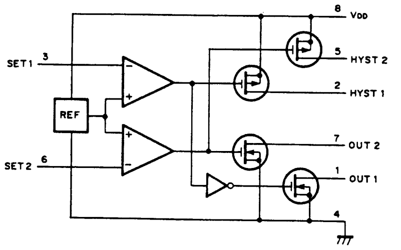

VDD
Q
Q̄
RD
VDD
VDD
Q
Q̄
RD
VDD

ICL7665SCPA(INTERSIL)
C-MOS MICROPOWER UNDER/OVER VOLTAGE DETECTOR
— TOP VIEW —

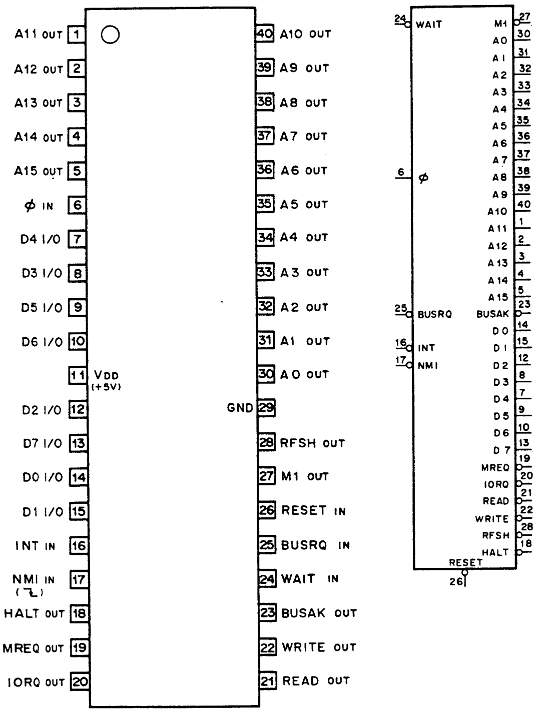

OUT 1 1
HYST 1 2
SET 1 3
4 GND
VDD (+1.8 to +10V) 8
7 OUT2
6 SET2
5 HYST2


2 HYST1
3 SET1
OUT1 1
5 HYST2
6 SET2
OUT2 7

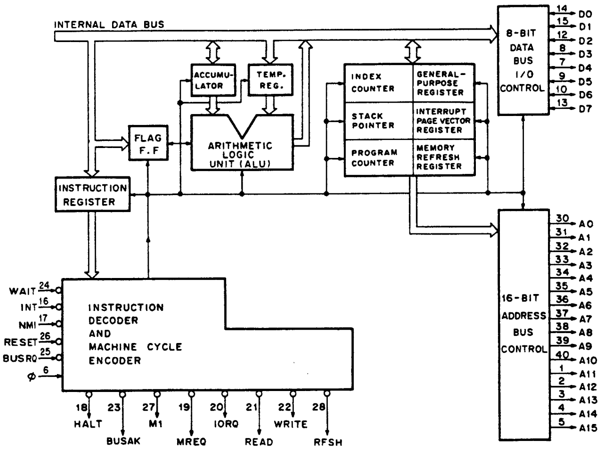
HYST:HYSTERESIS


8 VDD
5 HYST 2
2 HYST 1
SET1 3
REF
SET2 6
7 OUT 2
1 OUT 1
4

LH0080A (SHARP)
N-MOS 8-BIT MICROPROCESSOR
— TOP VIEW —



A11 OUT 1
A12 OUT 2
A13 OUT 3
A14 OUT 4
A15 OUT 5
φ IN 6
D4 I/O 7
D3 I/O 8
D5 I/O 9
D6 I/O 10
11 VDD (+5V)
D2 I/O 12
D7 I/O 13
D0 I/O 14
D1 I/O 15
INT IN 16
NMI IN 17
HALT OUT 18
MREQ OUT 19
IORQ OUT 20
40 A10 OUT
39 A9 OUT
38 A8 OUT
37 A7 OUT
36 A6 OUT
35 A5 OUT
34 A4 OUT
33 A3 OUT
32 A2 OUT
31 A1 OUT
30 A0 OUT
GND 29
28 RFSH OUT
27 M1 OUT
26 RESET IN
25 BUSRQ IN
24 WAIT IN
23 BUSAK OUT
22 WRITE OUT
21 READ OUT
WAIT
φ
BUSRQ
INT
NMI
RESET
M1
A0
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
A11
A12
A13
A14
A15
BUSAK
D0
D1
D2
D3
D4
D5
D6
D7
MREQ
IORQ
READ
WRITE
RFSH
HALT

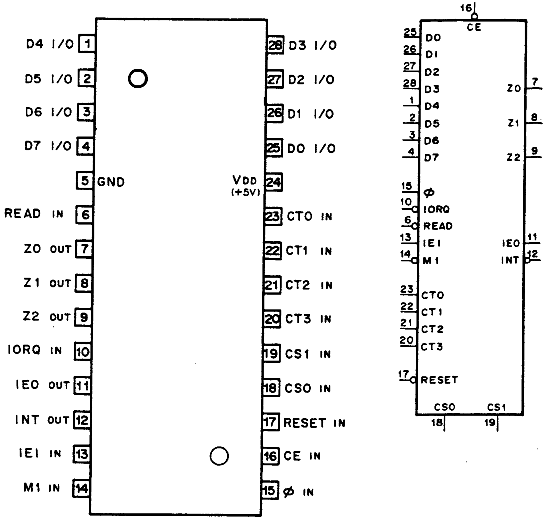


INTERNAL DATA BUS
ACCUMULATOR
TEMP. REG.
FLAG F.F
ARITHMETIC LOGIC UNIT (ALU)
INSTRUCTION REGISTER
INDEX COUNTER
STACK POINTER
PROGRAM COUNTER
GENERAL-PURPOSE REGISTER
INTERRUPT PAGE VECTOR REGISTER
MEMORY REFRESH REGISTER
8-BIT DATA BUS I/O CONTROL
16-BIT ADDRESS BUS CONTROL
INSTRUCTION DECODER AND MACHINE CYCLE ENCODER
WAIT
INT
NMI
RESET
BUSRQ
φ
HALT
BUSAK
M1
MREQ
IORQ
READ
WRITE
RFSH
D0
D1
D2
D3
D4
D5
D6
D7
A0
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
A11
A12
A13
A14
A15

TEMP.REG. ; TEMPORARY REGISTER

φ ; CLOCK
A0-A15 ; 3-STATE ADDRESS OUTPUT
BUSAK ; BUS ACKNOWLEDGE
BUSRQ ; BUS REQUEST
D0-D7 ; 3-STATE DATA INPUT/OUTPUT
HALT ; HALT STATE
INT ; INTERRUPT REQUEST
IORQ ; 3-STATE I/O REQUEST
M1 ; MACHINE CYCLE 1
MREQ ; 3-STATE MEMORY REQUEST
NMI ; NON-MASKABLE INTERRUPT (DOWN EDGE TRIGGER)
READ ; 3-STATE MEMORY READ
RFSH ; REFRESH
WRITE ; 3-STATE MEMORY WRITE

LH0082AD(SHARP)
N-MOS COUNTER TIMER CIRCUIT
— TOP VIEW —



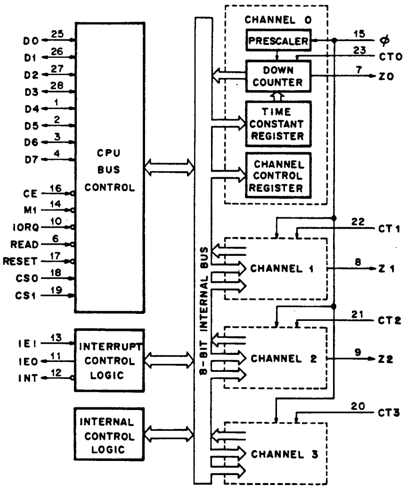
D4 I/O 1
D5 I/O 2
D6 I/O 3
D7 I/O 4
5 GND
READ IN 6
Z0 OUT 7
Z1 OUT 8
Z2 OUT 9
IORQ IN 10
IEO OUT 11
INT OUT 12
IEI IN 13
M1 IN 14
28 D3 I/O
27 D2 I/O
26 D1 I/O
25 D0 I/O
VDD (+5V) 24
23 CT0 IN
22 CT1 IN
21 CT2 IN
20 CT3 IN
19 CS1 IN
18 CS0 IN
17 RESET IN
16 CE IN
15 φ IN
CE
D0
D1
D2
D3
D4
D5
D6
D7
φ
IORQ
READ
IEI
M1
CT0
CT1
CT2
CT3
RESET
Z0
Z1
Z2
IEO
INT
CS0
CS1

φ ; SYSTEM CLOCK
CE ; CHIP ENABLE
CS0, CS1 ; CHANNEL SELECT
CT0-CT3 ; EXTERNAL CLOCK/TIMER TRIGGER
D0-D7 ; 3-STATE DATA INPUT/OUTPUT
IEI ; INTERRUPT ENABLE INPUT
IEO ; INTERRUPT ENABLE OUTPUT
INT ; INTERRUPT REQUEST (OPEN DRAIN)
IORQ ; I/O REQUEST
M1 ; MACHINE CYCLE 1
READ ; READ CYCLE STATUS
Z0-Z2 ; ZERO COUNT/TIME OUT

CHANNEL SELECT FUNCTION

CS1	CS0	SELECTED CHANNEL
0	0	0
0	1	1
1	0	2
1	1	3

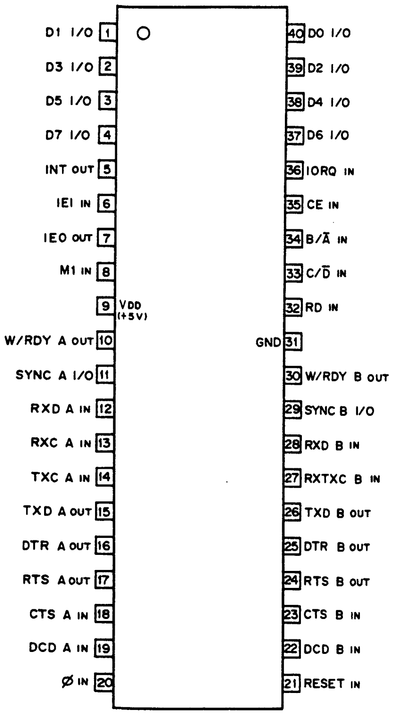
0; LOW LEVEL
1; HIGH LEVEL

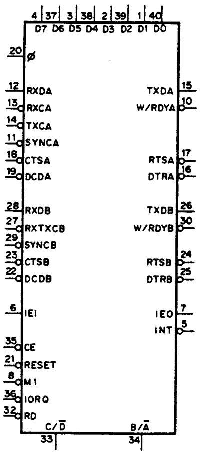


D0
D1
D2
D3
D4
D5
D6
D7
CE
M1
IORQ
READ
RESET
CS0
CS1
CPU BUS CONTROL
IEI
IEO
INT
INTERRUPT CONTROL LOGIC
INTERNAL CONTROL LOGIC
8-BIT INTERNAL BUS
CHANNEL 0
PRESCALER
DOWN COUNTER
TIME CONSTANT REGISTER
CHANNEL CONTROL REGISTER
φ
CT0
Z0
CT1
CHANNEL 1
Z1
CT2
CHANNEL 2
Z2
CT3
CHANNEL 3

LH0084A (SHARP)

N-MOS 2-CHANNEL SERIAL INPUT/OUTPUT
FOR MICROCOMPUTER SYSTEM
— TOP VIEW —

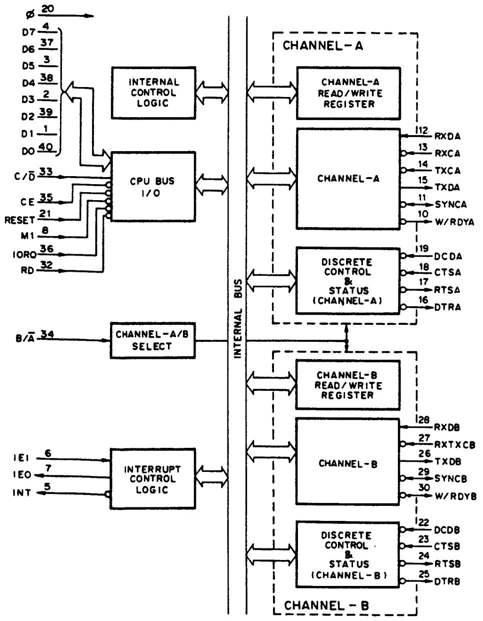

D1 I/O 1
D3 I/O 2
D5 I/O 3
D7 I/O 4
INT OUT 5
IEI IN 6
IEO OUT 7
M1 IN 8
9 VDD (+5V)
W/RDY A OUT 10
SYNC A I/O 11
RXD A IN 12
RXC A IN 13
TXC A IN 14
TXD A OUT 15
DTR A OUT 16
RTS A OUT 17
CTS A IN 18
DCD A IN 19
Ø IN 20
40 D0 I/O
39 D2 I/O
38 D4 I/O
37 D6 I/O
36 IORQ IN
35 CE IN
34 B/Ā IN
33 C/D̄ IN
32 RD IN
GND 31
30 W/RDY B OUT
29 SYNC B I/O
28 RXD B IN
27 RXTXC B IN
26 TXD B OUT
25 DTR B OUT
24 RTS B OUT
23 CTS B IN
22 DCD B IN
21 RESET IN


D7 D6 D5 D4 D3 D2 D1 D0
Ø
RXDA
RXCA
TXCA
SYNCA
CTSA
DCDA
TXDA
W/RDYA
RTSA
DTRA
RXDB
RXTXCB
SYNCB
CTSB
DCDB
TXDB
W/RDYB
RTSB
DTRB
IEI
IEO
INT
CE
RESET
M1
IORQ
RD
C/D̄
B/Ā

CHANNEL SELECT
FUNCTION TABLE

C/D̄	B/Ā	FUNCTION
0	0	CH-A DATA
0	1	CH-B DATA
1	0	CH-A CONT. WORD
1	1	CH-B CONT. WORD

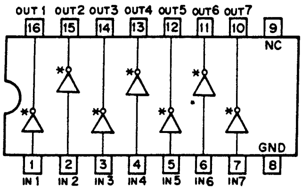
0; LOW LEVEL
1; HIGH LEVEL

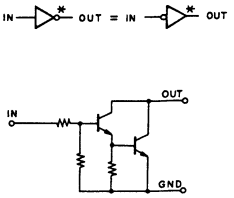

INTERNAL CONTROL LOGIC
CPU BUS I/O
CHANNEL-A/B SELECT
INTERRUPT CONTROL LOGIC
INTERNAL BUS
CHANNEL-A
CHANNEL-A READ/WRITE REGISTER
CHANNEL-A
DISCRETE CONTROL & STATUS (CHANNEL-A)
CHANNEL-B READ/WRITE REGISTER
CHANNEL-B
DISCRETE CONTROL & STATUS (CHANNEL-B)
CHANNEL - B
RXDA
RXCA
TXCA
TXDA
SYNCA
W/RDYA
DCDA
CTSA
RTSA
DTRA
RXDB
RXTXCB
TXDB
SYNCB
W/RDYB
DCDB
CTSB
RTSB
DTRB
C/D̄
CE
RESET
M1
IORQ
RD
B/Ā
IEI
IEO
INT

Ø	; SYSTEM CLOCK IN	RXD	; RECEIVE DATA IN
D7-D0	; DATA BUS(3 STATE)I/O	RXC	; RECEIVE CLOCK IN
C/D̄	; CONTROL/DATA SELECT IN	TXC	; TRANSMIT CLOCK IN
CE	; CHIP ENABLE IN	TXD	; TRANSMIT DATA OUT
M1	; MACHINE CYCLE 1 IN	SYNC	; EXTERNAL CHARACTER SYNCHRONIZATION I/O
IORQ	; I/O REQUEST IN		
RD	; READ IN	W/RDY	; WAIT/READY OUT
B/Ā	; CHANNEL B/A SELECT IN	DCD	; DATA CARRIER DETECT IN
IEI	; INTERRUPT ENABLE IN	CTS	; CLEAR TO SEND IN
IEO	; INTERRUPT ENABLE OUT	RTS	; REQUEST TO SEND OUT
INT	; INTERRUPT OUT	DTR	; DATA TERMINAL READY OUT

M54519P (MITSUBISHI)

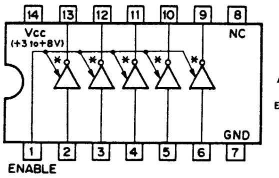
7 STAGE DRIVER
—TOP VIEW—

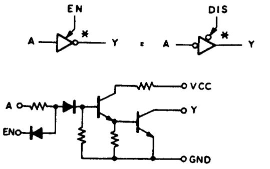

OUT1 OUT2 OUT3 OUT4 OUT5 OUT6 OUT7
16 15 14 13 12 11 10 9
NC
GND
1 2 3 4 5 6 7 8
IN1 IN2 IN3 IN4 IN5 IN6 IN7


IN
OUT
=
IN
OUT
OUT
IN
GND

M54529AP (MITSUBISHI)

TRANSISTOR ARRAY
— TOP VIEW —


14 13 12 11 10 9 8
Vcc (+3 to +8V)
NC
GND
1 2 3 4 5 6 7
ENABLE

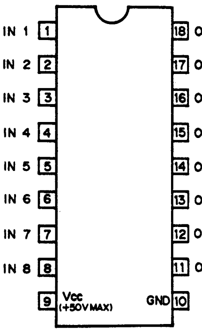

EN
DIS
A
Y
=
A
Y
A
VCC
Y
EN
GND

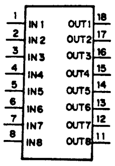
A	EN	Y
0	1	1
1	1	0
X	0	1

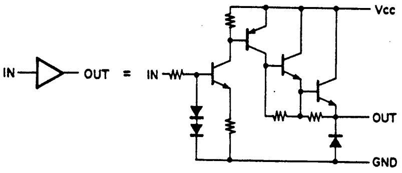
0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE
*; OPEN COLLECTOR

M54562P (MITSUBISHI)

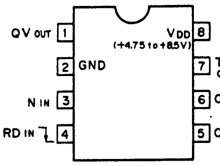
SOURCE TYPE DARLINGTON TRANSISTOR ARRAY
— TOP VIEW —

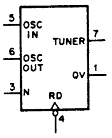

IN 1 1
IN 2 2
IN 3 3
IN 4 4
IN 5 5
IN 6 6
IN 7 7
IN 8 8
9 Vcc (+50V MAX)
GND 10
18 OUT 1
17 OUT 2
16 OUT 3
15 OUT 4
14 OUT 5
13 OUT 6
12 OUT 7
11 OUT 8

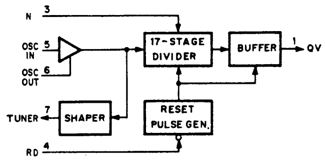

IN1 IN2 IN3 IN4 IN5 IN6 IN7 IN8
OUT1 OUT2 OUT3 OUT4 OUT5 OUT6 OUT7 OUT8
1 2 3 4 5 6 7 8
18 17 16 15 14 13 12 11

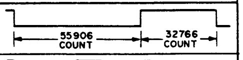
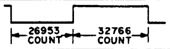

Vcc
IN
OUT
=
IN
OUT
GND

M58478P (MITSUBISHI)
C-MOS 17-STAGE OSCILLATOR/DIVIDER
— TOP VIEW —


QV OUT 1
2 GND
N IN 3
RD IN 4
VDD (+4.75 to +8.5V) 8
7 TUNER OUT
6 OSC OUT
5 OSC IN

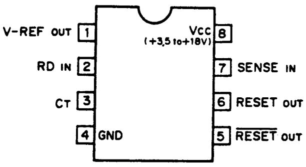

5 OSC IN
6 OSC OUT
3 N
RD 4
TUNER 7
QV 1

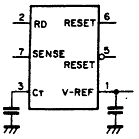

N 3
OSC IN 5
OSC OUT 6
TUNER 7
RD 4
17-STAGE DIVIDER
BUFFER
1 QV
SHAPER
RESET PULSE GEN.

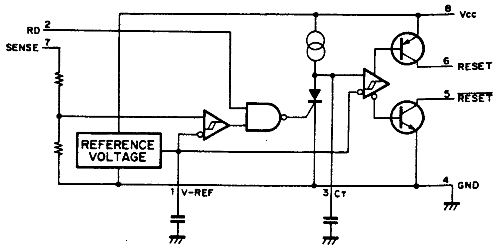
N	DIVIDER	Qv
0	1/88672	 55906 COUNT, 32766 COUNT
1	1/59719	 26953 COUNT, 32766 COUNT

0 ; LOW LEVEL
1 ; HIGH LEVEL or OPEN

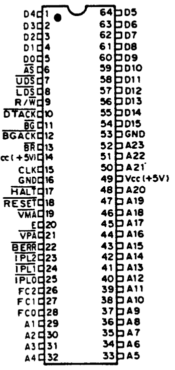
TL7705CP-B (TI)
POWER VOLTAGE SUPERVISOR
— TOP VIEW —

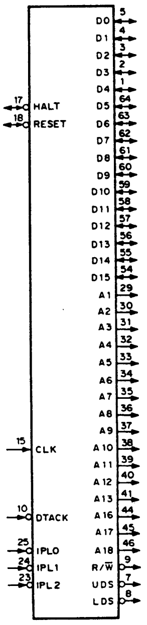

V-REF OUT 1
RD IN 2
CT 3
4 GND
Vcc (+3.5 to +18V) 8
7 SENSE IN
6 RESET OUT
5 RESET OUT


2 RD
7 SENSE
3 CT
RESET 6
RESET 5
V-REF 1


RD 2
SENSE 7
8 Vcc
6 RESET
5 RESET
4 GND
REFERENCE VOLTAGE
1 V-REF
3 CT

MC68000P8 (MOTOROLA)
H-MOS 16-BIT MICROPROCESSOR
— TOP VIEW —


D4 1
D3 2
D2 3
D1 4
D0 5
AS 6
UDS 7
LDS 8
R/W 9
DTACK 10
BG 11
BGACK 12
BR 13
Vcc (+5V) 14
CLK 15
GND 16
HALT 17
RESET 18
VMA 19
E 20
VPA 21
BERR 22
IPL2 23
IPL1 24
IPL0 25
FC2 26
FC1 27
FC0 28
A1 29
A2 30
A3 31
A4 32
64 D5
63 D6
62 D7
61 D8
60 D9
59 D10
58 D11
57 D12
56 D13
55 D14
54 D15
53 GND
52 A23
51 A22
50 A21
49 Vcc (+5V)
48 A20
47 A19
46 A18
45 A17
44 A16
43 A15
42 A14
41 A13
40 A12
39 A11
38 A10
37 A9
36 A8
35 A7
34 A6
33 A5


17 HALT
18 RESET
15 CLK
10 DTACK
25 IPL0
24 IPL1
23 IPL2
D0 5
D1 4
D2 3
D3 2
D4 1
D5 64
D6 63
D7 62
D8 61
D9 60
D10 59
D11 58
D12 57
D13 56
D14 55
D15 54
A1 29
A2 30
A3 31
A4 32
A5 33
A6 34
A7 35
A8 36
A9 37
A10 38
A11 39
A12 40
A13 41
A16 44
A17 45
A18 46
R/W 9
UDS 7
LDS 8

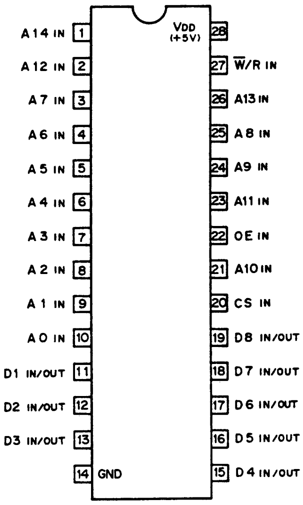
A1 - A23 ; ADDRESS
D0 - D15 ; DATA
R/W ; READ/WRITE
UDS ; UPPER DATA STROBE
LDS ; LOWER DATA STROBE
CLK ; CLOCK
DTACK ; DATA TRANSFER ACKNOWLEDGE
IPL0 - IPL2 ; INTERRUPT CONTROL

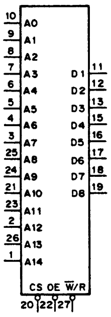
Signal Summary

Signal Name	Mnemonic	Input/Output	Active State	Hi-Z On HALT	Hi-Z On BGACK
Addess Bus	A1-A23	Output	High	Yes	Yes
Data Bus	D0-D15	Inout Output	High	Yes	Yes
Address Strobe	AS	Output	Low	No	Yes
Read/Write	R/W	Output	Read-High Write-Low	No	Yes
Upper and Lower Data Strobes	UDS·LDS	Output	Low	No	Yes
Data Transfer Acknowledge	DTACK	Input	Low	No	No
Bus Request	BR	Input	Low	No	No
Bus Grant	BG	Output	Low	No	No
Bus Grant Acknowledge	BGACK	Input	Low	No	No
Interrupt Pricrity Level	IPL0,IPL1,IPL2	Input	Low	No	No
Bus Error	BERR	Input	Low	No	No
Reset	RESET	Input/Output	Low	No	No
Halt	HALT	Input/Output	Low	No	No
Enable	E	Output	High	No	No
Valid Memory Address	VMA	Output	Low	No	Yes
Valid Peripheral Address	VPA	Input	Low	No	No
Function Code Output	FC0,FC1,FC2	Output	High	No	Yes
Clock	CLK	Input	High	No	No
Power Input	Vcc	Input	–	–	–
Ground	GND	Input	–	–	–

NOTES
1. Open drain
2. Function codes are pieced in high-impedance state during HALT for R9M, T6E and BF4 mask sets

uPD43256AC-12L(NEC) (ACCESS TIME=120nS)
C-MOS 262144-BIT (32768x8) STATIC RAM
— TOP VIEW —

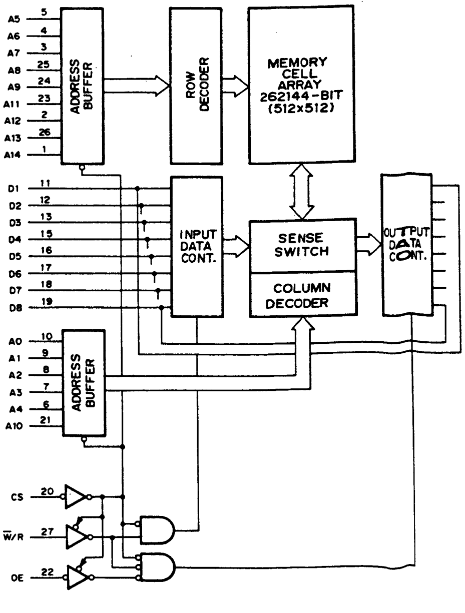

A14 IN 1
A12 IN 2
A7 IN 3
A6 IN 4
A5 IN 5
A4 IN 6
A3 IN 7
A2 IN 8
A1 IN 9
A0 IN 10
D1 IN/OUT 11
D2 IN/OUT 12
D3 IN/OUT 13
14 GND
VDD (+5V) 28
27 W/R IN
26 A13 IN
25 A8 IN
24 A9 IN
23 A11 IN
22 OE IN
21 A10 IN
20 CS IN
19 D8 IN/OUT
18 D7 IN/OUT
17 D6 IN/OUT
16 D5 IN/OUT
15 D4 IN/OUT


10 A0
9 A1
8 A2
7 A3
6 A4
5 A5
4 A6
3 A7
25 A8
24 A9
21 A10
23 A11
2 A12
26 A13
1 A14
D1 11
D2 12
D3 13
D4 15
D5 16
D6 17
D7 18
D8 19
CS OE W/R
20 22 27

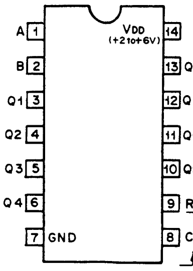
A0–A14 ; ADDRESS INPUTS
D1 – D8 ; DATA INPUTS/OUTPUTS
CS ; CHIP SELECT INPUT
OE ; OUTPUT ENABLE INPUT
W/R ; WRITE/READ INPUT

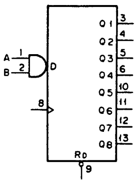
INPUTS			MODE	OUTPUT STATUS
CS	OE	W/R		
1	X	X	NO SELECTION	HI-Z
0	1	1	OUTPUT DISABLE	
0	0	1	READ	D OUT
0	X	0	WRITE	D IN

0 ; LOW LEVEL X ; DON'T CARE
1 ; HIGH LEVEL HI-Z ; HIGH IMPEDANCE


A5 5
A6 4
A7 3
A8 25
A9 24
A11 23
A12 2
A13 26
A14 1
ADDRESS BUFFER
ROW DECODER
MEMORY CELL ARRAY 262144-BIT (512x512)
D1 11
D2 12
D3 13
D4 15
D5 16
D6 17
D7 18
D8 19
INPUT DATA CONT.
SENSE SWITCH
COLUMN DECODER
OUTPUT DATA CONT.
A0 10
A1 9
A2 8
A3 7
A4 6
A10 21
ADDRESS BUFFER
CS 20
W/R 27
OE 22

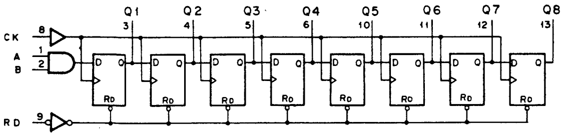
MC74HC164N (MOTOROLA)
C-MOS 8-BIT SERIAL-IN/PARALLEL-OUT SHIFT REGISTER
— TOP VIEW —


A 1
B 2
Q1 3
Q2 4
Q3 5
Q4 6
7 GND
VDD (+2to+6V) 14
13 Q8
12 Q7
11 Q6
10 Q5
9 RD
8 CK

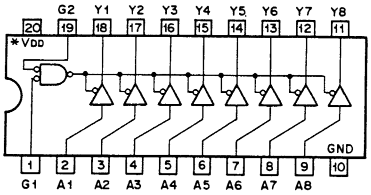

A 1
B 2
D
8
Q1 3
Q2 4
Q3 5
Q4 6
Q5 10
Q6 11
Q7 12
Q8 13
RD
9

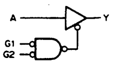
INPUTS				OUTPUTS			
RD	CK	A	B	Q1	Q2	----	Q8
0	X	X	X	0	0	0	0
1	0	X	X	Q1o	Q2o	----	Q8o
1	↑	1	1	1	Q1n	----	Q7n
1	↑	0	X	0	Q1n	----	Q7n
1	↑	X	0	0	Q1n	----	Q7n

0;LOW LEVEL
1;HIGH LEVEL
X;DON'T CARE


Q1 3
Q2 4
Q3 5
Q4 6
Q5 10
Q6 11
Q7 12
Q8 13
CK 8
A 1
B 2
RD 9
D Q
RD

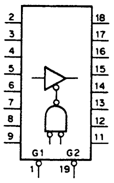
MC74HC541N (MOTOROLA)
C-MOS BUFFERS AND LINE DRIVERS WITH 3-STATE OUTPUTS
— TOP VIEW —


G2 Y1 Y2 Y3 Y4 Y5 Y6 Y7 Y8
20 19 18 17 16 15 14 13 12 11
*VDD
GND
1 2 3 4 5 6 7 8 9 10
G1 A1 A2 A3 A4 A5 A6 A7 A8



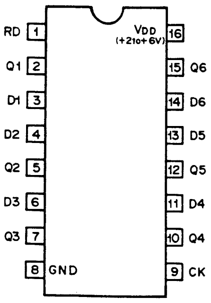
G1	G2	A	Y
0	0	0	0
0	0	1	1
1	X	X	HI-Z
X	1	X	HI-Z

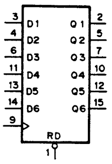
0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE
HI-Z ; HIGH IMPEDANCE


2 3 4 5 6 7 8 9
18 17 16 15 14 13 12 11
G1 G2
1 19

* VDD HC ; +2 to +6V
HCT ; +5V

MC74HC174N (MOTOROLA)
C-MOS D-TYPE FLIP-FLOP WITH RESET
— TOP VIEW —

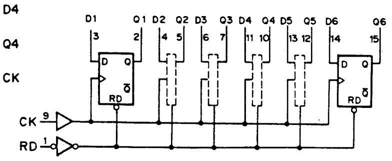

RD 1
Q1 2
D1 3
D2 4
Q2 5
D3 6
Q3 7
8 GND
VDD (+2to+6V) 16
15 Q6
14 D6
13 D5
12 Q5
11 D4
10 Q4
9 CK


3 D1
4 D2
6 D3
11 D4
13 D5
14 D6
9
Q1 2
Q2 5
Q3 7
Q4 10
Q5 12
Q6 15
RD
1

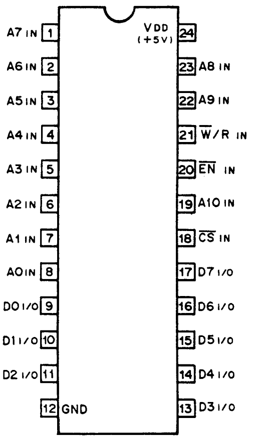
EACH FLIP-FLOP

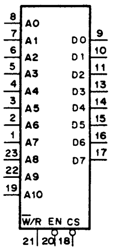
INPUT			OUT
RD	CK	D	Q
0	X	X	0
1	↑	0	0
1	↑	1	1
1	0	X	Qo

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE


D1 Q1 D2 Q2 D3 Q3 D4 Q4 D5 Q5 D6 Q6
3 2 4 5 6 7 11 10 13 12 14 15
D Q
RD
CK 9
RD 1

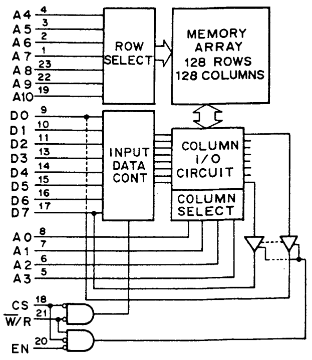
MSM5128-12RS (OKI) (ACCESS TIME = 120 nS)
C-MOS 16384(2048x8)-BIT HIGH SPEED STATIC RAM
— TOP VIEW —


A7 IN 1
A6 IN 2
A5 IN 3
A4 IN 4
A3 IN 5
A2 IN 6
A1 IN 7
A0 IN 8
D0 I/O 9
D1 I/O 10
D2 I/O 11
12 GND
VDD (+5V) 24
23 A8 IN
22 A9 IN
21 W/R IN
20 EN IN
19 A10 IN
18 CS IN
17 D7 I/O
16 D6 I/O
15 D5 I/O
14 D4 I/O
13 D3 I/O


8 A0
7 A1
6 A2
5 A3
4 A4
3 A5
2 A6
1 A7
23 A8
22 A9
19 A10
D0 9
D1 10
D2 11
D3 13
D4 14
D5 15
D6 16
D7 17
W/R EN CS
21 20 18

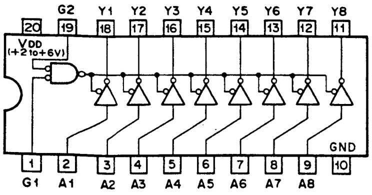
INPUTS			FUNCTION
CS	W/R	EN	
0	0	X	WRITE
0	1	0	READ
0	1	1	DISABLE (OUTPUT=HI-Z)
1	X	X	DISABLE (OUTPUT=HI-Z)

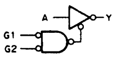
0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE
HI-Z ; HIGH IMPEDANCE


A4 4
A5 3
A6 2
A7 1
A8 23
A9 22
A10 19
ROW SELECT
MEMORY ARRAY 128 ROWS 128 COLUMNS
D0 9
D1 10
D2 11
D3 13
D4 14
D5 15
D6 16
D7 17
INPUT DATA CONT
COLUMN I/O CIRCUIT
COLUMN SELECT
A0 8
A1 7
A2 6
A3 5
CS 18
W/R 21
EN 20

A0 – A10 ; ADDRESS INPUTS
W/R ; WRITE/READ ENABLE
EN ; OUTPUT ENABLE
CS ; CHIP SELECT
D0 – D7 ; DATA INPUTS/OUTPUTS

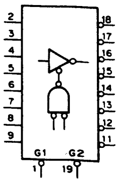
MC74HC540N (MOTOROLA)
C-MOS 3-STATE INVERTING BUFFER/LINE DRIVER/LINE RECEIVER
— TOP VIEW —


G2 Y1 Y2 Y3 Y4 Y5 Y6 Y7 Y8
20 19 18 17 16 15 14 13 12 11
VDD (+2 to+6V)
GND
1 2 3 4 5 6 7 8 9 10
G1 A1 A2 A3 A4 A5 A6 A7 A8

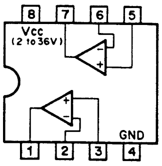


G1	G2	A	Y
0	0	0	1
0	0	1	0
1	X	X	HI-Z
X	1	X	HI-Z

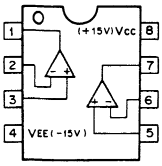
0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE
HI-Z ; HIGH IMPEDANCE


2 3 4 5 6 7 8 9
18 17 16 15 14 13 12 11
G1 G2
1 19

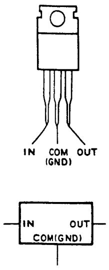
NJM2903D (JRC)
μPC393C
VOLTAGE COMPARATOR
— TOP VIEW —


8 7 6 5
Vcc (2 to 36V)
GND
1 2 3 4

NJM4558D (JRC)
OPERATIONAL AMPLIFIER
— TOP VIEW —

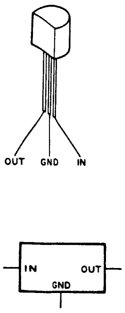

1
2
3
4
(+15V)Vcc
VEE(-15V)
8
7
6
5

NJM78 ? ?B (JRC)
POSITIVE VOLTAGE REGULATOR (1A)
— SIDE VIEW —


IN
COM (GND)
OUT
IN
OUT
COM(GND)

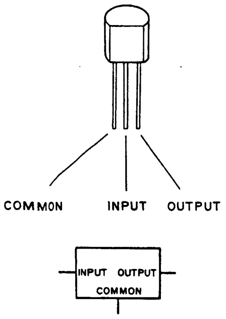
OUTPUT VOLTAGE	NJM78??B
+5V	--------
+6V	--------
+7V	--------
+8V	--------
+8.5V	--------
+9V	--------
+10V	--------
+12V	NJM7812B
+15V	--------
+18V	--------
+20V	--------
+24V	--------

NJM78L ? ?A (NEC)
POSITIVE VOLTAGE REGULATOR (100mA)


OUT
GND
IN
IN
OUT
GND

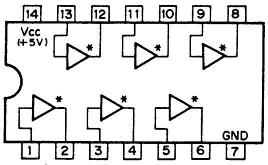
OUTPUT VOLTAGE	NJM78L??A
+2.6V	NJM78L02A
+4V	---------
+5V	NJM78L05A
+6V	NJM78L06A
+6.2V	---------
+7V	---------
+8V	NJM78L08A
+8.2V	---------
+9V	NJM78L09A
+10V	---------
+12V	NJM78L12A
+15V	NJM78L15A
+18V	NJM78L18A
+20V	NJM78L20A
+24V	NJM78L24A

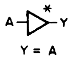
NJM79L ? ?A (JRC)
NEGATIVE VOLTAGE REGULATOR (100mA)
— FRONT VIEW —


COMMON
INPUT
OUTPUT
INPUT
OUTPUT
COMMON

OUTPUT VOLTAGE	NJM79L??A
−3V	NJM79L03A
−4V	
−5V	NJM79L05A
−6V	NJM79L06A
−7V	
−8V	NJM79L08A
−9V	NJM79L09A
−10V	
−12V	NJM79L12A
−15V	NJM79L15A
−18V	NJM79L18A
−20V	
−24V	NJM79L24A

SN7407N (TI)
TTL BUFFER/DRIVER WITH OPEN-COLLECTOR
— TOP VIEW —


14
13
12
11
10
9
8
Vcc
(+5V)
*
GND
1
2
3
4
5
6
7

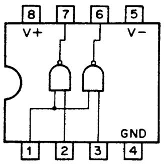


Y = A

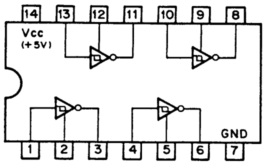
A	Y
0	0
1	1

0 ; LOW LEVEL
1 ; HIGH LEVEL
* ; OPEN COLLECTOR

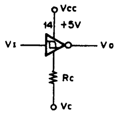
SN75150P (TI)
DUAL LINE DRIVER
— TOP VIEW —

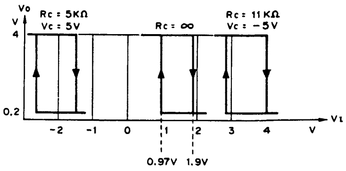

8
7
6
5
V+
V−
GND
1
2
3
4

SN75189AN (TI)
QUADRUPLE LINE RECEIVER
— TOP VIEW —

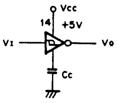

14
13
12
11
10
9
8
Vcc
(+5V)
GND
1
2
3
4
5
6
7

INPUT THRESHOLD SHIFTING

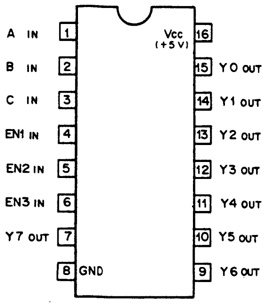

Vcc
14
+5V
VI
Vo
Rc
Vc

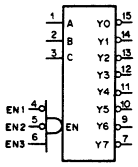


INPUT NOISE FILTERING


Vcc
14
+5V
VI
Vo
Cc

SN74ALS138N (TI)
TTL 3-TO-8-LINE DECODER/DEMULTIPLEXER
— TOP VIEW —


A IN
B IN
C IN
EN1 IN
EN2 IN
EN3 IN
Y7 OUT
GND
Vcc (+5 V)
Y0 OUT
Y1 OUT
Y2 OUT
Y3 OUT
Y4 OUT
Y5 OUT
Y6 OUT
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16

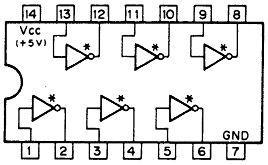

A
B
C
EN1
EN2
EN3
EN
Y0
Y1
Y2
Y3
Y4
Y5
Y6
Y7

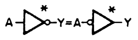
INPUTS				OUTPUTS							
EN	C	B	A	Y7	Y6	Y5	Y4	Y3	Y2	Y1	Y0
0	X	X	X	1	1	1	1	1	1	1	1
1	0	0	0	1	1	1	1	1	1	1	0
1	0	0	1	1	1	1	1	1	1	0	1
1	0	1	0	1	1	1	1	1	0	1	1
1	0	1	1	1	1	1	1	0	1	1	1
1	1	0	0	1	1	1	0	1	1	1	1
1	1	0	1	1	1	0	1	1	1	1	1
1	1	1	0	1	0	1	1	1	1	1	1
1	1	1	1	0	1	1	1	1	1	1	1

$EN = \overline{EN1} \cdot \overline{EN2} \cdot EN3$

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE

SN74HC06N(TI)
TTL INVERTER BUFFER/DRIVER WITH OPEN-COLLECTOR
— TOP VIEW —


Vcc (+5 V)
GND
14
13
12
11
10
9
8
1
2
3
4
5
6
7

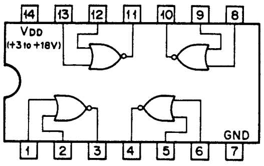


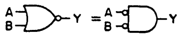
$Y = \bar{A}$

A	Y
0	1
1	0

0 ; LOW LEVEL
1 ; HIGH LEVEL
* ; OPEN COLLECTOR

TC4001BP (TOSHIBA)
C-MOS 2-INPUT NOR GATE
— TOP VIEW —


VDD (+3 to +18V)
GND
14
13
12
11
10
9
8
1
2
3
4
5
6
7

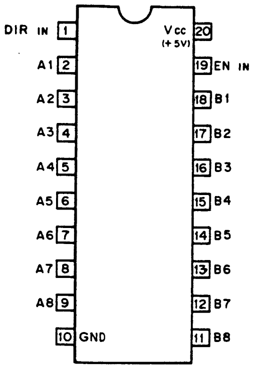


$Y = \overline{A + B} = \bar{A} \cdot \bar{B}$

A	B	Y
0	0	1
0	1	0
1	0	0
1	1	0

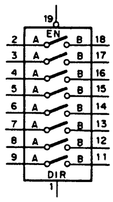
0 ; LOW LEVEL
1 ; HIGH LEVEL

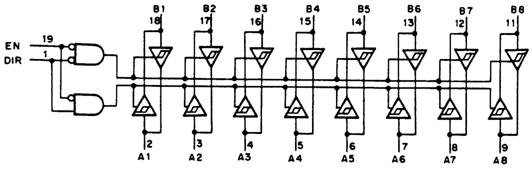
SN74ALS245AN (TI)
TTL BILATERAL SCHMITT TRIGGER BUS TRANSCEIVERS WITH 3-STATE OUTPUT
— TOP VIEW —


DIR IN
A1
A2
A3
A4
A5
A6
A7
A8
GND
Vcc (+5V)
EN IN
B1
B2
B3
B4
B5
B6
B7
B8
1
2
3
4
5
6
7
8
9
10
20
19
18
17
16
15
14
13
12
11

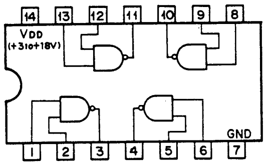
EN	DIR	OPERATION
0	0	B to A
0	1	A to B
1	X	HI - Z

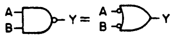
0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE
HI-Z ; HIGH IMPEDANCE


19
EN
A
B
DIR
1
2
3
4
5
6
7
8
9
18
17
16
15
14
13
12
11


EN
DIR
19
1
B1
B2
B3
B4
B5
B6
B7
B8
18
17
16
15
14
13
12
11
A1
A2
A3
A4
A5
A6
A7
A8
2
3
4
5
6
7
8
9

TC4011BP (TOSHIBA)
C-MOS 2-INPUT NAND GATE
— TOP VIEW —


VDD (+3 to +18V)
GND
14
13
12
11
10
9
8
1
2
3
4
5
6
7

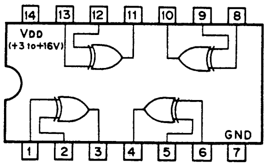


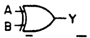
$Y = \overline{A \cdot B} = \bar{A} + \bar{B}$

A	B	Y
0	0	1
0	1	1
1	0	1
1	1	0

0 ; LOW LEVEL
1 ; HIGH LEVEL

μPD4030BC (NEC)
TC4030BP (TOSHIBA)
C-MOS EXCLUSIVE OR GATE
— TOP VIEW —


VDD (+3 to +16V)
GND
14
13
12
11
10
9
8
1
2
3
4
5
6
7

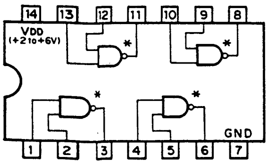


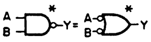
$Y = \bar{A} \cdot B + A \cdot \bar{B}$

A	B	Y
0	0	0
0	1	1
1	0	1
1	1	0

0 ; LOW LEVEL
1 ; HIGH LEVEL

SN74HC03N (TI)
C-MOS 2-INPUT POSITIVE-NAND GATE WITH OPEN-DRAIN
— TOP VIEW —


VDD (+2 to +6V)
GND
14
13
12
11
10
9
8
1
2
3
4
5
6
7

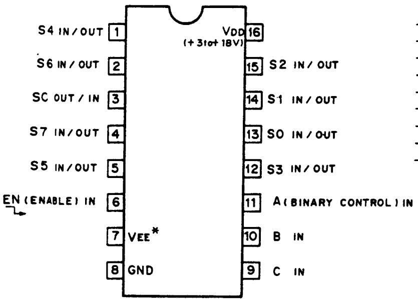


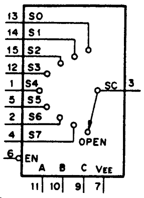
$Y = \overline{A \cdot B} = \bar{A} + \bar{B}$

A	B	Y
0	0	1
0	1	1
1	0	1
1	1	0

0 ; LOW LEVEL
1 ; HIGH LEVEL
* ; OPEN DRAIN

μPD4051BC (NEC)
TC4051BPHB (TOSHIBA)
C-MOS 8-CHANNEL MULTIPLEXER/DEMULTIPLEXER
— TOP VIEW —


S4 IN/OUT 1
S6 IN/OUT 2
SC OUT/IN 3
S7 IN/OUT 4
S5 IN/OUT 5
EN (ENABLE) IN 6
7 VEE*
8 GND
VDD 16
(+3to+18V)
15 S2 IN/OUT
14 S1 IN/OUT
13 S0 IN/OUT
12 S3 IN/OUT
11 A (BINARY CONTROL) IN
10 B IN
9 C IN

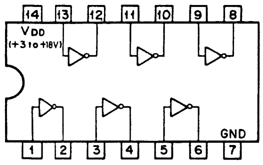

13 S0
14 S1
15 S2
12 S3
1 S4
5 S5
2 S6
4 S7
SC 3
OPEN
6 EN
A B C VEE
11 10 9 7

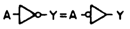
VEE* ; VDD — VEE: +3 to +18V

EN	C	B	A	"ON" CHANNEL
0	0	0	0	0
0	0	0	1	1
0	0	1	0	2
0	0	1	1	3
0	1	0	0	4
0	1	0	1	5
0	1	1	0	6
0	1	1	1	7
1	X	X	X	OPEN

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE

TC4069UBP (TOSHIBA)
C-MOS INVERTER
— TOP VIEW —


14 13 12 11 10 9 8
VDD
(+3 to +18V)
GND
1 2 3 4 5 6 7

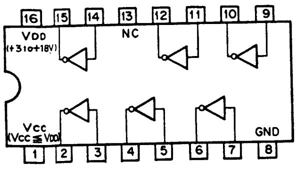


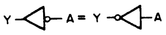
$Y=\bar{A}$

A	Y
0	1
1	0

0 ; LOW LEVEL
1 ; HIGH LEVEL

TC5020BP (TOSHIBA)
C-MOS LOW-TO-HIGH VOLTAGE TRANSLATION INVERTER
— TOP VIEW —


16 15 14 13 12 11 10 9
VDD
(+3to+18V)
NC
Vcc
(Vcc ≦ VDD)
GND
1 2 3 4 5 6 7 8

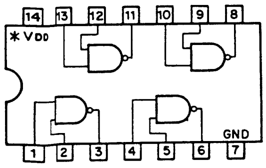


$Y=\bar{A}$

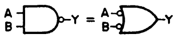
A	Y
0	1
1	0

0 ; LOW LEVEL
1 ; HIGH LEVEL

TC74HC00P (TOSHIBA)
C-MOS 2-INPUT NAND GATE
— TOP VIEW —


14 13 12 11 10 9 8
✻ VDD
GND
1 2 3 4 5 6 7

✻ VDD HC; +2to+6V
HCT; +5V

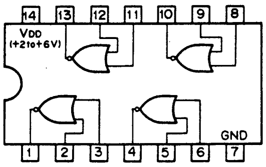


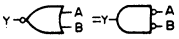
$Y=\overline{A\cdot B}=\bar{A}+\bar{B}$

A	B	Y
0	0	1
0	1	1
1	0	1
1	1	0

0; LOW LEVEL
1; HIGH LEVEL

TC74HC02P (TOSHIBA)
C MOS 2-INPUT POSITIVE-NOR GATE
— TOP VIEW —


14 13 12 11 10 9 8
VDD
(+2to+6V)
GND
1 2 3 4 5 6 7

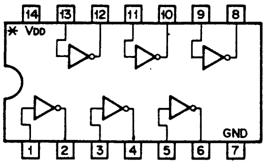


$Y=\overline{A+B}=\bar{A}\cdot\bar{B}$

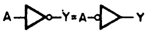
A	B	Y
0	0	1
0	1	0
1	0	0
1	1	0

0: LOW LEVEL
1; HIGH LEVEL

TC74HC04P (TOSHIBA)
C-MOS INVERTER
— TOP VIEW —


14 13 12 11 10 9 8
✻ VDD
GND
1 2 3 4 5 6 7

✻ VDD HC, HCU; +2to+6V
HCT; +5V

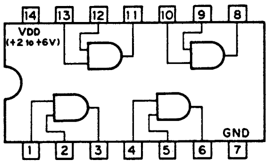


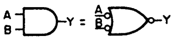
$Y=\bar{A}$

A	Y
0	1
1	0

0: LOW LEVEL
1: HIGH LEVEL

TC74HC08P (TOSHIBA)
C-MOS 2-INPUT AND GATE
— TOP VIEW —


14 13 12 11 10 9 8
VDD
(+2 to +6V)
GND
1 2 3 4 5 6 7

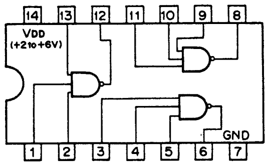


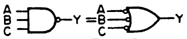
$Y=A\cdot B=\overline{\bar{A}+\bar{B}}$

A	B	Y
0	0	0
0	1	0
1	0	0
1	1	1

0; LOW LEVEL
1; HIGH LEVEL

TC74HC10P (TOSHIBA)
C-MOS 3-INPUT NAND GATE
— TOP VIEW —


14 13 12 11 10 9 8
VDD
(+2to+6V)
GND
1 2 3 4 5 6 7

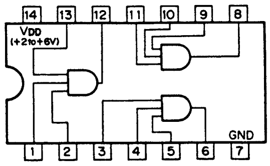


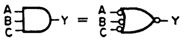
$Y=\overline{ABC}=\bar{A}+\bar{B}+\bar{C}$

A	B	C	Y
0	0	0	1
0	0	1	1
0	1	0	1
0	1	1	1
1	0	0	1
1	0	1	1
1	1	0	1
1	1	1	0

0 : LOW LEVEL
1 : HIGH LEVEL

TC74HC11P (TOSHIBA)
C-MOS 3-INPUT POSITIVE-AND GATE
— TOP VIEW —


14 13 12 11 10 9 8
VDD
(+2to+6V)
GND
1 2 3 4 5 6 7

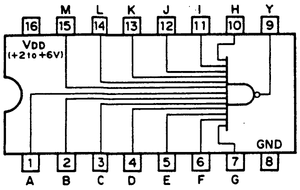


$Y=A\cdot B\cdot C=\overline{\bar{A}+\bar{B}+\bar{C}}$

A	B	C	Y
0	0	0	0
0	0	1	0
0	1	0	0
0	1	1	0
1	0	0	0
1	0	1	0
1	1	0	0
1	1	1	1

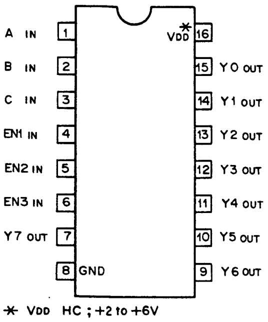
0; LOW LEVEL
1; HIGH LEVEL

TC74HC133P (TOSHIBA)
C-MOS 13-INPUT NAND GATE
— TOP VIEW —

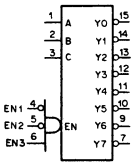

M L K J I H Y
16 15 14 13 12 11 10 9
VDD (+2 to +6V)
GND
1 2 3 4 5 6 7 8
A B C D E F G

Y = $\overline{A \cdot B \cdot C \cdot D \cdot E \cdot F \cdot G \cdot H \cdot I \cdot J \cdot K \cdot L \cdot M}$

TC74HC138P (TOSHIBA)
C-MOS 3-TO-8 LINE DECODER/DEMULTIPLEXER
— TOP VIEW —


A IN 1
B IN 2
C IN 3
EN1 IN 4
EN2 IN 5
EN3 IN 6
Y7 OUT 7
8 GND
VDD* 16
15 Y0 OUT
14 Y1 OUT
13 Y2 OUT
12 Y3 OUT
11 Y4 OUT
10 Y5 OUT
9 Y6 OUT

✱ VDD HC ; +2 to +6V
HCT ; +5V

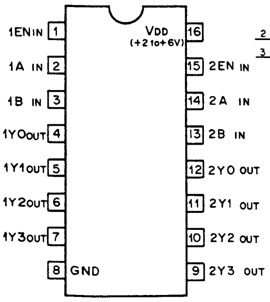

1 A
2 B
3 C
EN1 4
EN2 5
EN3 6
EN
Y0 15
Y1 14
Y2 13
Y3 12
Y4 11
Y5 10
Y6 9
Y7 7

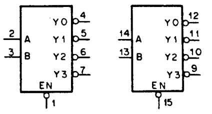
INPUT				OUTPUT							
EN	C	B	A	Y7	Y6	Y5	Y4	Y3	Y2	Y1	Y0
0	X	X	X	1	1	1	1	1	1	1	1
1	0	0	0	1	1	1	1	1	1	1	0
1	0	0	1	1	1	1	1	1	1	0	1
1	0	1	0	1	1	1	1	1	0	1	1
1	0	1	1	1	1	1	1	0	1	1	1
1	1	0	0	1	1	1	0	1	1	1	1
1	1	0	1	1	1	0	1	1	1	1	1
1	1	1	0	1	0	1	1	1	1	1	1
1	1	1	1	0	1	1	1	1	1	1	1

EN = $\overline{EN1} \cdot \overline{EN2} \cdot EN3$

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE

TC74HC139P (TOSHIBA)
C-MOS 1-OF-4 DECODER/DEMULTIPLEXER
— TOP VIEW —

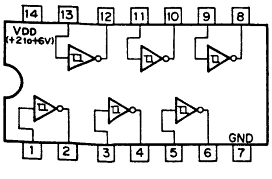

1EN IN 1
1A IN 2
1B IN 3
1Y0 OUT 4
1Y1 OUT 5
1Y2 OUT 6
1Y3 OUT 7
8 GND
VDD (+2 to +6V) 16
15 2EN IN
14 2A IN
13 2B IN
12 2Y0 OUT
11 2Y1 OUT
10 2Y2 OUT
9 2Y3 OUT

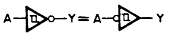

2 A
3 B
Y0 4
Y1 5
Y2 6
Y3 7
EN
1
14 A
13 B
Y0 12
Y1 11
Y2 10
Y3 9
EN
15

INPUTS			OUTPUTS			
EN	B	A	Y3	Y2	Y1	Y0
0	0	0	1	1	1	0
0	0	1	1	1	0	1
0	1	0	1	0	1	1
0	1	1	0	1	1	1
1	X	X	1	1	1	1

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE

TC74HC14P (TOSHIBA)
C-MOS SCHMITT TRIGGER INVERTER
— TOP VIEW —

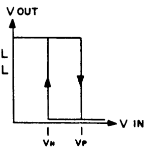

14 13 12 11 10 9 8
VDD (+2 to +6V)
GND
1 2 3 4 5 6 7



Y = $\bar{A}$

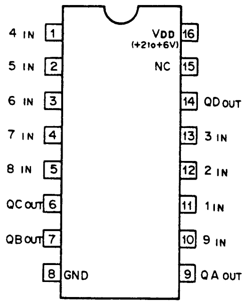
A	Y
0	1
1	0

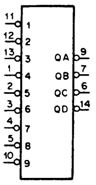
0 ; LOW LEVEL
1 ; HIGH LEVEL



VDD	VN	VP
2.0V	0.75V	1.25V
4.5V	1.9V	2.7V
6.0V	2.6V	3.6V

TC74HC147P (TOSHIBA)
C-MOS 10-TO-4-LINE PRIORITY ENCODER
— TOP VIEW —

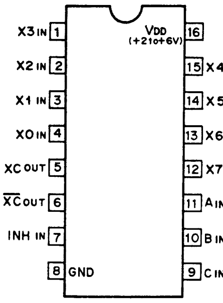

4 IN 1
5 IN 2
6 IN 3
7 IN 4
8 IN 5
QC OUT 6
QB OUT 7
8 GND
VDD (+2 to +6V) 16
NC 15
14 QD OUT
13 3 IN
12 2 IN
11 1 IN
10 9 IN
9 QA OUT

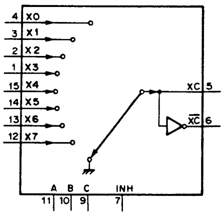

11 1
12 2
13 3
1 4
2 5
3 6
4 7
5 8
10 9
QA 9
QB 7
QC 6
QD 14

INPUT									OUTPUT			
9	8	7	6	5	4	3	2	1	QD	QC	QB	QA
1	1	1	1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	0	1	1	1	0
1	1	1	1	1	1	1	0	X	1	1	0	1
1	1	1	1	1	1	0	X	X	1	1	0	0
1	1	1	1	1	0	X	X	X	1	0	1	1
1	1	1	1	0	X	X	X	X	1	0	1	0
1	1	1	0	X	X	X	X	X	1	0	0	1
1	1	0	X	X	X	X	X	X	1	0	0	0
1	0	X	X	X	X	X	X	X	0	1	1	1
0	X	X	X	X	X	X	X	X	0	1	1	0

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE

TC74HC151P (TOSHIBA)
C-MOS 8-LINE-TO-1-LINE DATA SELECTOR/MULTIPLEXER
— TOP VIEW —

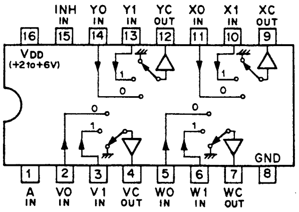

X3 IN 1
X2 IN 2
X1 IN 3
X0 IN 4
XC OUT 5
XC OUT 6
INH IN 7
8 GND
VDD (+2 to +6V) 16
15 X4 IN
14 X5 IN
13 X6 IN
12 X7 IN
11 A IN
10 B IN
9 C IN

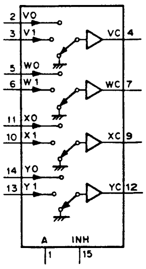

4 X0
3 X1
2 X2
1 X3
15 X4
14 X5
13 X6
12 X7
XC 5
XC 6
A B C INH
11 10 9 7

CONTROL INPUT				ON CHANNEL
INH	C	B	A	
0	0	0	0	0
0	0	0	1	1
0	0	1	0	2
0	0	1	1	3
0	1	0	0	4
0	1	0	1	5
0	1	1	0	6
0	1	1	1	7
1	X	X	X	GND

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE

TC74HC157P (TOSHIBA)
C-MOS 2-LINE-TO-1-LINE DATA SELECTOR/MULTIPLEXER
— TOP VIEW —

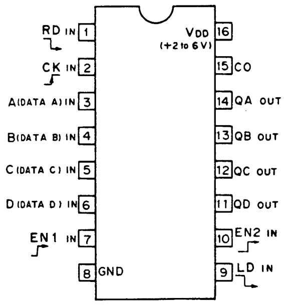

INH IN
Y0 IN
Y1 IN
YC OUT
X0 IN
X1 IN
XC OUT
16 15 14 13 12 11 10 9
VDD (+2 to +6V)
GND
1 2 3 4 5 6 7 8
A IN
V0 IN
V1 IN
VC OUT
W0 IN
W1 IN
WC OUT

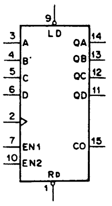

2 V0
3 V1
VC 4
5 W0
6 W1
WC 7
11 X0
10 X1
XC 9
14 Y0
13 Y1
YC 12
A INH
1 15

CONT. IN		ON CHANNEL
INH	A	
0	0	0
0	1	1
1	X	GND

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE

TC74HC163P (TOSHIBA)
C-MOS PRESETTABLE SYNCHRONOUS 4-BIT BINARY COUNTER
— TOP VIEW —


RD IN 1
CK IN 2
A(DATA A) IN 3
B(DATA B) IN 4
C(DATA C) IN 5
D(DATA D) IN 6
EN1 IN 7
8 GND
VDD (+2 to 6V) 16
15 CO
14 QA OUT
13 QB OUT
12 QC OUT
11 QD OUT
10 EN2 IN
9 LD IN


9
LD
3 A
4 B
5 C
6 D
2
7 EN1
10 EN2
RD
1
QA 14
QB 13
QC 12
QD 11
CO 15

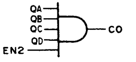
MODE SELECTION

CONTROL INPUTS				MODE
RD	LD	EN1	EN2	
0	X	X	X	RESET (SYNCHRONOUS)
1	0	X	X	PRESET (SYNCHRONOUS)
1	1	0	X	NO COUNT
1	1	X	0	NO COUNT
1	1	1	1	COUNT

COUNT SEQUENCE

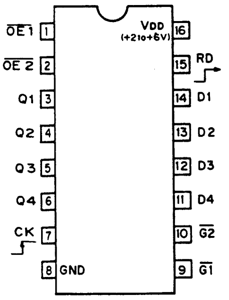
COUNT	OUTPUTS			
	QD	QC	QB	QA
0	0	0	0	0
1	0	0	0	1
2	0	0	1	0
3	0	0	1	1
4	0	1	0	0
5	0	1	0	1
6	0	1	1	0
7	0	1	1	1
8	1	0	0	0
9	1	0	0	1
10	1	0	1	0
11	1	0	1	1
12	1	1	0	0
13	1	1	0	1
14	1	1	1	0
15	1	1	1	1

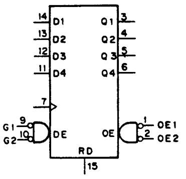
CARRY OUTPUT "CO"


QA
QB
QC
QD
EN2
CO

CO IS HIGH WHEN EN2 INPUT IS HIGH AND COUNT IS "15".

TC74HC173P (TOSHIBA)
C-MOS 4-BIT D-TYPE REGISTERS WITH 3-STATE OUTPUT
— TOP VIEW —


$\overline{OE1}$ 1
$\overline{OE2}$ 2
Q1 3
Q2 4
Q3 5
Q4 6
CK 7
8 GND
VDD (+2to+6V) 16
15 RD
14 D1
13 D2
12 D3
11 D4
10 $\overline{G2}$
9 $\overline{G1}$

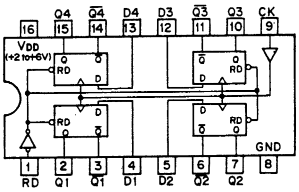

14 D1
13 D2
12 D3
11 D4
7
G1 9
G2 10
DE
RD
15
Q1 3
Q2 4
Q3 5
Q4 6
OE
1 OE1
2 OE2

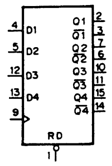
D1 – D4 ; DATA INPUT
Q1 – Q4 ; OUTPUT (3-STATE)
$\overline{G1}$, $\overline{G2}$; DATA ENABLE INPUT
$\overline{OE1}$, $\overline{OE2}$; OUTPUT ENABLE INPUT

INPUT							OUTPUT
RD	CK	DATA IN		D	OUTPUT EN		Q
		$\overline{G1}$	$\overline{G2}$		$\overline{OE1}$	$\overline{OE2}$	
1	X	X	X	X	0	0	0
0	0	X	X	X	0	0	Q0
0	↑	1	X	X	0	0	Q0
0	↑	X	1	X	0	0	Q0
0	↑	0	0	0	0	0	0
0	↑	0	0	1	0	0	1
X	X	X	X	X	1	X	HI-Z
X	X	X	X	X	X	1	HI-Z

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE
HI-Z ; HIGH IMPEDANCE
Q0 ; LEVEL OF Q BEFORE THE INDICATED INPUT CONDITIONS WERE STABLISHED

TC74HC175P (TOSHIBA)
C-MOS D-TYPE FLIP-FLOP WITH RESET
— TOP VIEW —

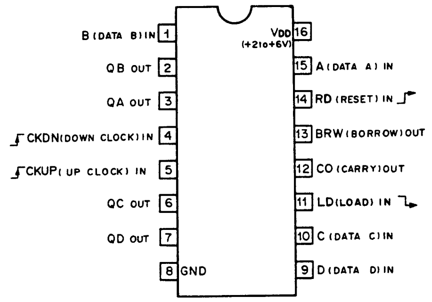

Q4 $\overline{Q4}$ D4 D3 $\overline{Q3}$ Q3 CK
16 15 14 13 12 11 10 9
VDD (+2to+6V)
Q $\overline{Q}$ RD D
GND
1 2 3 4 5 6 7 8
RD Q1 $\overline{Q1}$ D1 D2 $\overline{Q2}$ Q2

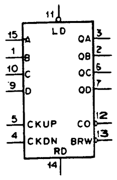

4 D1
5 D2
12 D3
13 D4
9
RD
1
Q1 2
$\overline{Q1}$ 3
Q2 7
$\overline{Q2}$ 6
Q3 10
$\overline{Q3}$ 11
Q4 15
$\overline{Q4}$ 14

RD	CK	D	Q	$\overline{Q}$
0	X	X	0	1
1	↑	1	1	0
1	↑	0	0	1
1	0	X	Qo	$\overline{Q}$o

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE

TC74HC193P (TOSHIBA)
C-MOS PRESETTABLE SYNCHRONOUS 4-BIT UP/DOWN COUNTER
— TOP VIEW —


B (DATA B) IN 1
QB OUT 2
QA OUT 3
CKDN (DOWN CLOCK) IN 4
CKUP (UP CLOCK) IN 5
QC OUT 6
QD OUT 7
8 GND
VDD (+2to+6V) 16
15 A (DATA A) IN
14 RD (RESET) IN
13 BRW (BORROW) OUT
12 CO (CARRY) OUT
11 LD (LOAD) IN
10 C (DATA C) IN
9 D (DATA D) IN


11
LD
15 A
1 B
10 C
9 D
5 CKUP
4 CKDN
RD
14
QA 3
QB 2
QC 6
QD 7
CO 12
BRW 13

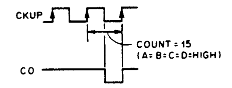
CONTROL INPUT				MODE
RD	LD	CKUP	CKDN	
1	X	X	X	RESET TO ZERO
0	0	X	X	PRESET
0	1	↑	1	UP COUNT
0	1	1	↑	DOWN COUNT
0	1	1	1	NO COUNT

COUNT	OUTPUT			
	QD	QC	QB	QA
0	0	0	0	0
1	0	0	0	1
2	0	0	1	0
3	0	0	1	1
4	0	1	0	0
5	0	1	0	1
6	0	1	1	0
7	0	1	1	1
8	1	0	0	0
9	1	0	0	1
10	1	0	1	0
11	1	0	1	1
12	1	1	0	0
13	1	1	0	1
14	1	1	1	0
15	1	1	1	1

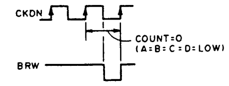
UP COUNT ↑
DOWN COUNT ↓

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE

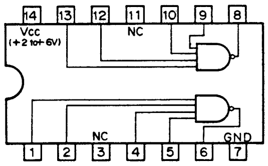
$CO = \overline{\overline{CKUP} \cdot QA \cdot QB \cdot QC \cdot QD}$

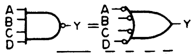

CKUP
COUNT = 15
(A=B=C=D=HIGH)
CO

$BRW = \overline{\overline{CKDN} \cdot \overline{QA} \cdot \overline{QB} \cdot \overline{QC} \cdot \overline{QD}}$


CKDN
COUNT=0
(A=B=C=D=LOW)
BRW

TC74HC20P (TOSHIBA)
C-MOS 4-INPUT POSITIVE-NAND GATE
— TOP VIEW —


14 13 12 11 10 9 8
Vcc (+2 to+6V)
NC
NC
GND
1 2 3 4 5 6 7

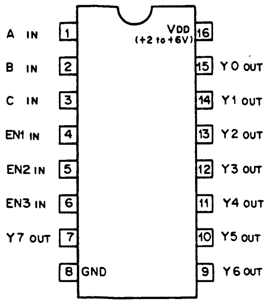

A
B
C
D
Y
=
A
B
C
D
Y

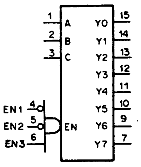
$Y = \overline{A \cdot B \cdot C \cdot D} = \overline{A} + \overline{B} + \overline{C} + \overline{D}$

A	B	C	D	Y
0	0	0	0	1
0	0	0	1	1
0	0	1	0	1
0	0	1	1	1
0	1	0	0	1
⋮	⋮	⋮	⋮	⋮
1	1	0	1	1
1	1	1	0	1
1	1	1	1	0

0 ; LOW LEVEL
1 ; HIGH LEVEL

TC74HC238P (TOSHIBA)
C-MOS 3-TO-8 LINE DECODER/DEMULTIPLEXER
— TOP VIEW —


A IN 1
B IN 2
C IN 3
EN1 IN 4
EN2 IN 5
EN3 IN 6
Y7 OUT 7
8 GND
VDD (+2 to +6V) 16
15 Y0 OUT
14 Y1 OUT
13 Y2 OUT
12 Y3 OUT
11 Y4 OUT
10 Y5 OUT
9 Y6 OUT

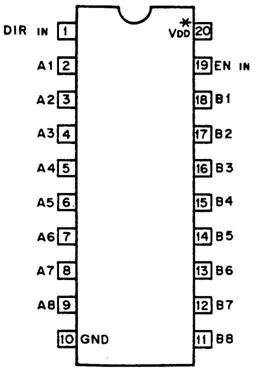

1 A
2 B
3 C
EN1 4
EN2 5
EN3 6
EN
Y0 15
Y1 14
Y2 13
Y3 12
Y4 11
Y5 10
Y6 9
Y7 7

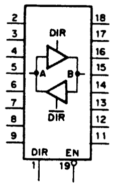
INPUT				OUTPUT							
EN	C	B	A	Y7	Y6	Y5	Y4	Y3	Y2	Y1	Y0
0	X	X	X	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0	1
1	0	0	1	0	0	0	0	0	0	1	0
1	0	1	0	0	0	0	0	0	1	0	0
1	0	1	1	0	0	0	0	1	0	0	0
1	1	0	0	0	0	0	1	0	0	0	0
1	1	0	1	0	0	1	0	0	0	0	0
1	1	1	0	0	1	0	0	0	0	0	0
1	1	1	1	1	0	0	0	0	0	0	0

$EN = \overline{EN1} \cdot \overline{EN2} \cdot EN3$

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE

TC74HC245P (TOSHIBA)
C-MOS BILATERAL BUS TRANSCEIVERS WITH 3-STATE OUTPUT
— TOP VIEW —

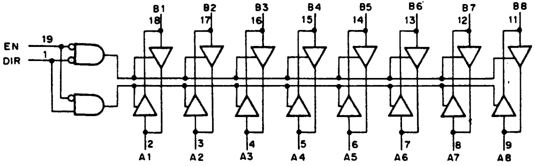

DIR IN 1
A1 2
A2 3
A3 4
A4 5
A5 6
A6 7
A7 8
A8 9
10 GND
* VDD 20
19 EN IN
18 B1
17 B2
16 B3
15 B4
14 B5
13 B6
12 B7
11 B8


2 3 4 5 6 7 8 9
18 17 16 15 14 13 12 11
DIR
A
B
DIR
DIR 1
EN 19

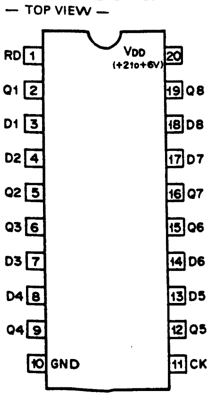
EN	DIR	OPERATION
0	0	B to A
0	1	A to B
1	X	HI - Z

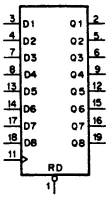
0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE
HI-Z; HIGH IMPEDANCE

* VDD HC; +2 to +6V
HCT; +5V


EN 19
DIR 1
B1 18
B2 17
B3 16
B4 15
B5 14
B6 13
B7 12
B8 11
2 A1
3 A2
4 A3
5 A4
6 A5
7 A6
8 A7
9 A8

TC74HC273P (TOSHIBA)
C-MOS D-TYPE FLIP-FLOP WITH RESET
— TOP VIEW —

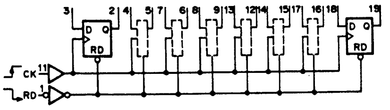

RD 1
Q1 2
D1 3
D2 4
Q2 5
Q3 6
D3 7
D4 8
Q4 9
10 GND
VDD (+2 to +6V) 20
19 Q8
18 D8
17 D7
16 Q7
15 Q6
14 D6
13 D5
12 Q5
11 CK


3 D1
4 D2
7 D3
8 D4
13 D5
14 D6
17 D7
18 D8
11
Q1 2
Q2 5
Q3 6
Q4 9
Q5 12
Q6 15
Q7 16
Q8 19
RD
1

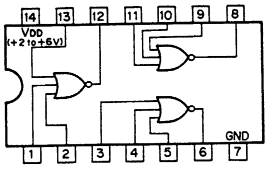
EACH FLIP - FLOP

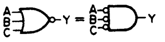
INPUT			OUT
RD	CK	D	Q
0	X	X	0
1	↑	0	0
1	↑	1	1
1	0	X	Qo

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE


3 2 4 5 7 6 8 9 13 12 14 15 17 16 18 19
D Q
RD
CK 11
RD 1

TC74HC27P (TOSHIBA)
C-MOS 3-LINE POSITIVE-NOR GATE
— TOP VIEW —


14 13 12 11 10 9 8
VDD (+2 to +6V)
GND
1 2 3 4 5 6 7

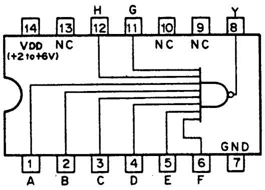


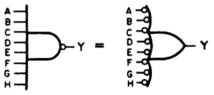
$Y = \overline{A+B+C} = \overline{A} \cdot \overline{B} \cdot \overline{C}$

A	B	C	Y
0	0	0	1
0	0	1	0
0	1	0	0
0	1	1	0
1	0	0	0
1	0	1	0
1	1	0	0
1	1	1	0

0 ; LOW LEVEL
1 ; HIGH LEVEL

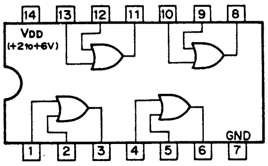
TC74HC30P (TOSHIBA)
C-MOS 8-INPUT POSITIVE-NAND GATE
— TOP VIEW —

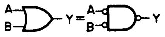

H G Y
14 13 12 11 10 9 8
VDD NC
(+2 to +6V)
NC NC
GND
1 2 3 4 5 6 7
A B C D E F


A B C D E F G H
Y
A B C D E F G H
Y

$Y = \overline{A \cdot B \cdot C \cdot D \cdot E \cdot F \cdot G \cdot H}$
$= \overline{A} + \overline{B} + \overline{C} + \text{- - - -} + \overline{H}$

TC74HC32P (TOSHIBA)
C-MOS 2-INPUT OR GATE
— TOP VIEW —


14 13 12 11 10 9 8
VDD (+2 to +6V)
GND
1 2 3 4 5 6 7

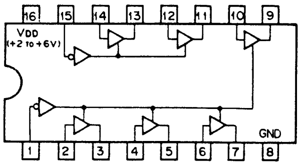


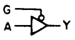
$Y = A + B = \overline{\overline{A} \cdot \overline{B}}$

A	B	Y
0	0	0
0	1	1
1	0	1
1	1	1

0; LOW LEVEL
1; HIGH LEVEL

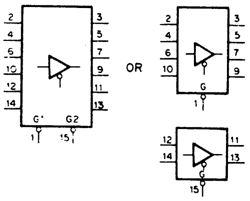
TC74HC367P (TOSHIBA)
C-MOS BUS DRIVER WITH 3-STATE OUTPUTS
— TOP VIEW —


16 15 14 13 12 11 10 9
VDD (+2 to +6V)
GND
1 2 3 4 5 6 7 8



G	A	Y
0	0	0
0	1	1
1	X	HI-Z

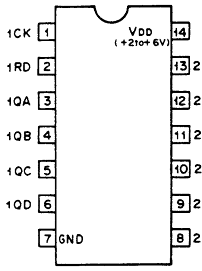
0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE
HI-Z; HIGH IMPEDANCE

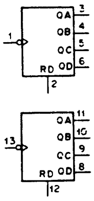

2 4 6 10 12 14
3 5 7 9 11 13
G1 G2
1 15
OR
2 4 6 10
3 5 7 9
G
1
12 14
11 13
G
15

TC74HC393P (TOSHIBA)

C-MOS 4-BIT BINARY COUNTER

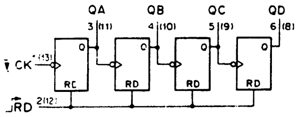
— TOP VIEW —


1CK 1
1RD 2
1QA 3
1QB 4
1QC 5
1QD 6
7 GND
14 VDD (+2to+6V)
13 2CK
12 2RD
11 2QA
10 2QB
9 2QC
8 2QD


1
QA 3
QB 4
QC 5
RD QD 6
2
13
QA 11
QB 10
QC 9
RD QD 8
12

COUNT SEQUENCE

COUNT	QD	QC	QB	QA
0	0	0	0	0
1	0	0	0	1
2	0	0	1	0
3	0	0	1	1
4	0	1	0	0
5	0	1	0	1
6	0	1	1	0
7	0	1	1	1
8	1	0	0	0
9	1	0	0	1
10	1	0	1	0
11	1	0	1	1
12	1	1	0	0
13	1	1	0	1
14	1	1	1	0
15	1	1	1	1


QA
QB
QC
QD
3 (11)
4 (10)
5 (9)
6 (8)
CK (13)
RD 2(12)
Q
RD

RESET/COUNT FUNCTION

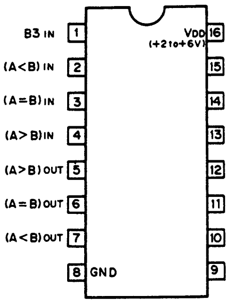
RD	QD	QC	QB	QA
1	0	0	0	0
0	COUNT			

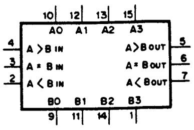
0; LOW LEVEL
1; HIGH LEVEL

TC74HC85P (TOSHIBA)

C-MOS 4-BIT MAGNITUDE COMPARATOR

— TOP VIEW —


B3 IN 1
(A<B) IN 2
(A=B) IN 3
(A>B) IN 4
(A>B) OUT 5
(A=B) OUT 6
(A<B) OUT 7
8 GND
16 VDD (+2to+6V)
15 A3 IN
14 B2 IN
13 A2 IN
12 A1 IN
11 B1 IN
10 A0 IN
9 B0 IN


10 12 13 15
A0 A1 A2 A3
4 A>B IN
3 A=B IN
2 A<B IN
A>B OUT 5
A=B OUT 6
A<B OUT 7
B0 B1 B2 B3
9 11 14 1

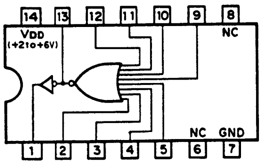
INPUTS								OUTPUTS		
DATA COMPARING					CASCADING					
	A3, B3	A2, B2	A1, B1	A0, B0	A<B	A=B	A>B	A<B	A=B	A>B
A>B	A3>B3	X	X	X	X	X	X	0	0	1
	A3=B3	A2>B2	X	X						
	A3=B3	A2=B2	A1>B1	X						
	A3=B3	A2=B2	A1=B1	A0>B0						
A=B	A3=B3	A2=B2	A1=B1	A0=B0	0	0	0	1	0	1
					0	0	1	0	0	1
					X	1	X	0	1	0
					1	0	0	1	0	0
					1	0	1	0	0	0
A<B	A3=B3	A2=B2	A1=B1	A0<B0	X	X	X	1	0	0
	A3=B3	A2=B2	A1<B1	X						
	A3=B3	A2<B2	X	X						
	A3<B3	X	X	X						

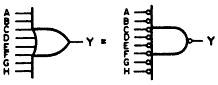
0; LOW LEVEL 1; HIGH LEVEL X; DON'T CARE

TC74HC4078P (TOSHIBA)

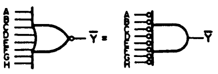
C-MOS 8-INPUT OR/NOR GATE

— TOP VIEW —


14
13
12
11
10
9
8
VDD (+2to+6V)
NC
NC
GND
1
2
3
4
5
6
7


A
B
C
D
E
F
G
H
Y
Y

$$Y = A+B+C+D+E+F+G+H$$
$$= \overline{\bar{A}\cdot\bar{B}\cdot\bar{C}\cdot\bar{D}\cdot\bar{E}\cdot\bar{F}\cdot\bar{G}\cdot\bar{H}}$$


A
B
C
D
E
F
G
H
Ȳ
Ȳ

$$\bar{Y} = \overline{A+B+C+D+E+F+G+H}$$
$$= \bar{A}\cdot\bar{B}\cdot\bar{C}\cdot\bar{D}\cdot\bar{E}\cdot\bar{F}\cdot\bar{G}\cdot\bar{H}$$

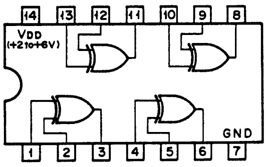
A	B	C	D	E	F	G	H	Y	$\bar{Y}$
0	0	0	0	0	0	0	0	0	1
0	0	0	0	0	0	0	0	1	0
0	0	0	0	0	0	1	0	1	0
0	0	0	0	0	0	1	1	1	0
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	1	0
1	1	1	1	1	1	1	0	1	0
1	1	1	1	1	1	1	1	1	0

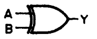
0; LOW LEVEL
1; HIGH LEVEL

TC74HC86P (TOSHIBA)

C-MOS EXCLUSIVE OR GATE

— TOP VIEW —


14
13
12
11
10
9
8
VDD (+2to+6V)
GND
1
2
3
4
5
6
7



$$Y = \bar{A}\cdot B + A\cdot\bar{B}$$

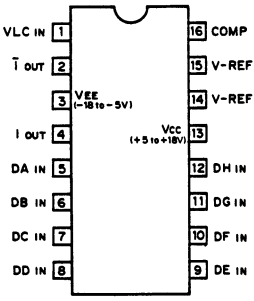
A	B	Y
0	0	0
0	1	1
1	0	1
1	1	0

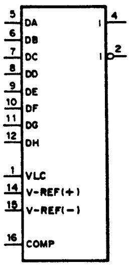
0; LOW LEVEL
1; HIGH LEVEL

TD62901P (TOSHIBA)

HIGH SPEED 8-BIT D/A CONVERTER

— TOP VIEW —


VLC IN 1
Ī OUT 2
3 VEE (-18to-5V)
I OUT 4
DA IN 5
DB IN 6
DC IN 7
DD IN 8
16 COMP
15 V-REF(−) IN
14 V-REF(+) IN
Vcc (+5to+18V) 13
12 DH IN
11 DG IN
10 DF IN
9 DE IN

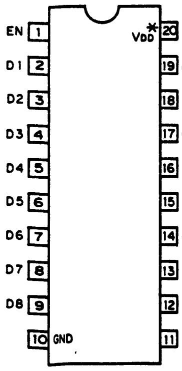

5 DA
6 DB
7 DC
8 DD
9 DE
10 DF
11 DG
12 DH
1 VLC
14 V-REF(+)
15 V-REF(−)
16 COMP
I 4
I 2

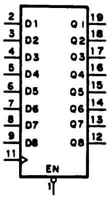
COMP ; COMPENSATION
DA – DH ; BINARY DATA
I ; COMPLEMENTARY CURRENT
V-REF ; REFERENCE VOLTAGE
VLC ; THRESHOLD LEVEL CONTROL

TC74HC574P (TOSHIBA)

C-MOS 3-STATE D-TYPE EDGE-TRIGGERED FLIP-FLOP

— TOP VIEW —

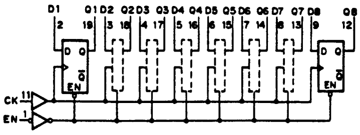

EN 1
D1 2
D2 3
D3 4
D4 5
D5 6
D6 7
D7 8
D8 9
10 GND
VDD* 20
19 Q1
18 Q2
17 Q3
16 Q4
15 Q5
14 Q6
13 Q7
12 Q8
11 CK


2 D1
3 D2
4 D3
5 D4
6 D5
7 D6
8 D7
9 D8
11
Q1 19
Q2 18
Q3 17
Q4 16
Q5 15
Q6 14
Q7 13
Q8 12
EN
1

EACH FLIP-FLOP

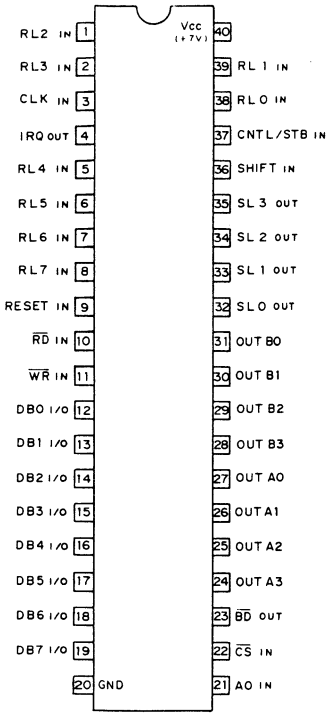
INPUTS			OUT
EN	CK	D	Q
0	↑	1	1
0	↑	0	0
0	0	X	Q0
1	X	X	HI-Z

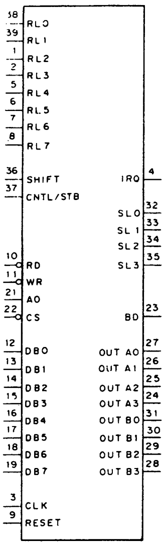
0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE
HI-Z ; HIGH IMPEDANCE


D1 Q1 D2 Q2 D3 Q3 D4 Q4 D5 Q5 D6 Q6 D7 Q7 D8 Q8
2 19 3 18 4 17 5 16 6 15 7 14 8 13 9 12
D Q
Q̄
EN
CK 11
EN 1

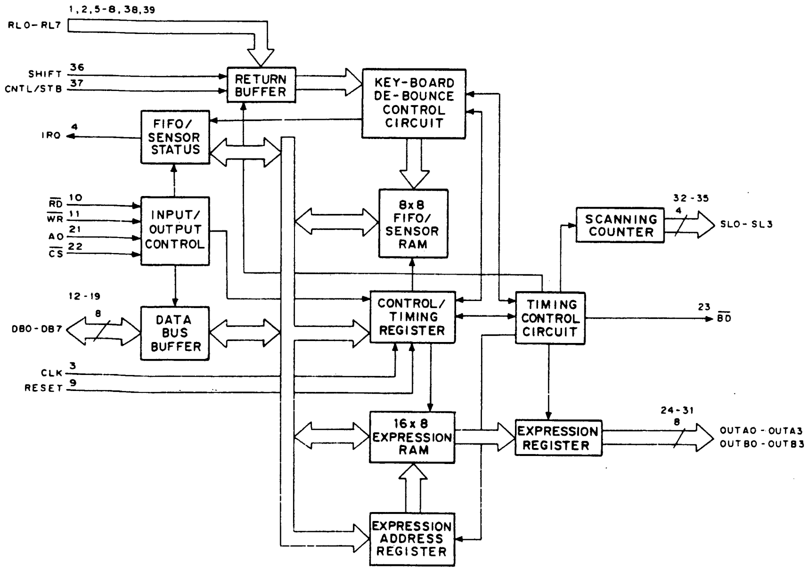
* VDD HC ; +2 to +6V
HCT ; +5V

TMP82C79P-2 (TOSHIBA)
C-MOS PROGRAMABLE KEY BOARD DISPLAY INTERFACE DEVICE
— TOP VIEW —

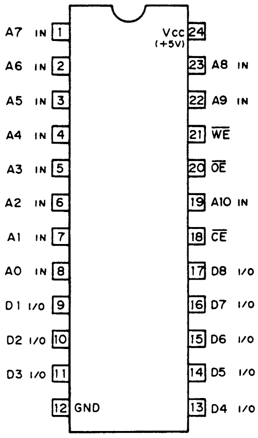

RL2 IN 1
RL3 IN 2
CLK IN 3
IRQ OUT 4
RL4 IN 5
RL5 IN 6
RL6 IN 7
RL7 IN 8
RESET IN 9
RD IN 10
WR IN 11
DB0 I/O 12
DB1 I/O 13
DB2 I/O 14
DB3 I/O 15
DB4 I/O 16
DB5 I/O 17
DB6 I/O 18
DB7 I/O 19
20 GND
40 Vcc (+7V)
39 RL 1 IN
38 RL 0 IN
37 CNTL/STB IN
36 SHIFT IN
35 SL 3 OUT
34 SL 2 OUT
33 SL 1 OUT
32 SL 0 OUT
31 OUT B0
30 OUT B1
29 OUT B2
28 OUT B3
27 OUT A0
26 OUT A1
25 OUT A2
24 OUT A3
23 BD OUT
22 CS IN
21 A0 IN

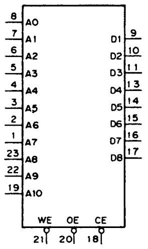

38 RL0
39 RL1
1 RL2
2 RL3
5 RL4
6 RL5
7 RL6
8 RL7
36 SHIFT
37 CNTL/STB
10 RD
11 WR
21 A0
22 CS
12 DB0
13 DB1
14 DB2
15 DB3
16 DB4
17 DB5
18 DB6
19 DB7
3 CLK
9 RESET
IRQ 4
SL0 32
SL1 33
SL2 34
SL3 35
BD 23
OUT A0 27
OUT A1 26
OUT A2 25
OUT A3 24
OUT B0 31
OUT B1 30
OUT B2 29
OUT B3 28

A0 ; COMMAND/DATA CONTROL INPUT
$\overline{\text{BD}}$; DISPLAY BLANKING OUTPUT
CLK ; CLOCK INPUT
CNTL/STB ; CONTROL/STROBE INPUT
$\overline{\text{CS}}$; CHIP SELECT INPUT
DB0-DB7 ; DATA BUS INPUT/OUTPUT
IRQ ; INTERRUPT REQUEST OUTPUT
OUT A0-A3
OUT B0-B3 ; 16x4 BIT EXPRESSION REFRESH REGISTER
$\overline{\text{RD}}$; READ STROBE INPUT
RESET ; RESET INPUT
RL0-RL7 ; RETURN LINE INPUT
SHIFT ; SHIFT INPUT
SL0-SL3 ; SCANNING LINE OUTPUT
$\overline{\text{WR}}$; WRITE STROBE INPUT


1,2,5-8,38,39
RL0-RL7
SHIFT 36
CNTL/STB 37
RETURN BUFFER
KEY-BOARD DE-BOUNCE CONTROL CIRCUIT
IRQ 4
FIFO/ SENSOR STATUS
RD 10
WR 11
A0 21
CS 22
INPUT/ OUTPUT CONTROL
8x8 FIFO/ SENSOR RAM
32-35
4
SCANNING COUNTER
SL0-SL3
12-19
8
DB0-DB7
DATA BUS BUFFER
CONTROL/ TIMING REGISTER
TIMING CONTROL CIRCUIT
23
BD
CLK 3
RESET 9
24-31
8
16x8 EXPRESSION RAM
EXPRESSION REGISTER
OUT A0-OUT A3
OUT B0-OUT B3
EXPRESSION ADDRESS REGISTER

CXK5816PN-12L (SONY) (ACCESS TIME=120nS)
C-MOS 16384-BIT (2048x8) STATIC RAM
— TOP VIEW —

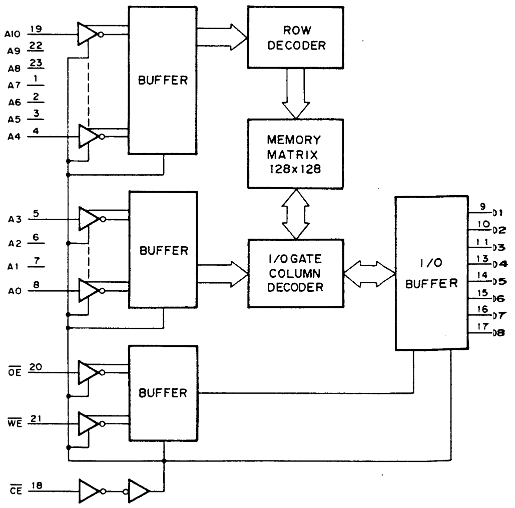

A7 IN 1
A6 IN 2
A5 IN 3
A4 IN 4
A3 IN 5
A2 IN 6
A1 IN 7
A0 IN 8
D1 I/O 9
D2 I/O 10
D3 I/O 11
12 GND
24 Vcc (+5V)
23 A8 IN
22 A9 IN
21 WE
20 OE
19 A10 IN
18 CE
17 D8 I/O
16 D7 I/O
15 D6 I/O
14 D5 I/O
13 D4 I/O


8 A0
7 A1
6 A2
5 A3
4 A4
3 A5
2 A6
1 A7
23 A8
22 A9
19 A10
D1 9
D2 10
D3 11
D4 13
D5 14
D6 15
D7 16
D8 17
WE OE CE
21 20 18

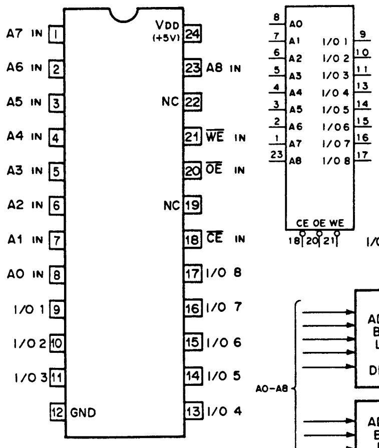
A0-A10 ; ADDRESS INPUTS
$\overline{\text{CE}}$; CHIP ENABLE
D1-D8 ; DATA INPUTS/OUTPUTS
$\overline{\text{OE}}$; OUTPUT ENABLE
$\overline{\text{WE}}$; WRITE ENABLE

INPUTS			FUNCTION
$\overline{\text{CE}}$	$\overline{\text{OE}}$	$\overline{\text{WE}}$	
1	X	X	NO SELECTION(HI-Z)
0	1	1	OUTPUT DISABLE(HI-Z)
0	0	1	READ
0	X	0	WRITE

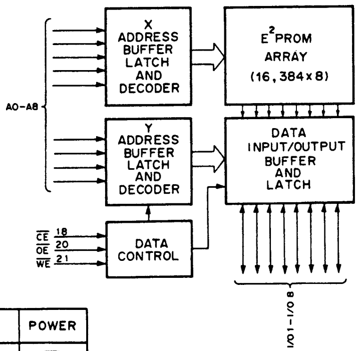
0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE
HI-Z ; HIGH IMPEDANCE


A10 19
A9 22
A8 23
A7 1
A6 2
A5 3
A4 4
BUFFER
ROW DECODER
MEMORY MATRIX 128x128
A3 5
A2 6
A1 7
A0 8
BUFFER
I/O GATE COLUMN DECODER
I/O BUFFER
9 D1
10 D2
11 D3
13 D4
14 D5
15 D6
16 D7
17 D8
OE 20
WE 21
BUFFER
CE 18

X2804AP (XICOR)
N-MOS 4096 (512x8)-BIT E²PROM
— TOP VIEW —


A7 IN 1
A6 IN 2
A5 IN 3
A4 IN 4
A3 IN 5
A2 IN 6
A1 IN 7
A0 IN 8
I/O 1 9
I/O 2 10
I/O 3 11
12 GND
VDD (+5V) 24
23 A8 IN
NC 22
21 WE IN
20 OE IN
NC 19
18 CE IN
17 I/O 8
16 I/O 7
15 I/O 6
14 I/O 5
13 I/O 4
8 A0
7 A1
6 A2
5 A3
4 A4
3 A5
2 A6
1 A7
23 A8
I/O 1 9
I/O 2 10
I/O 3 11
I/O 4 13
I/O 5 14
I/O 6 15
I/O 7 16
I/O 8 17
CE OE WE
18 20 21

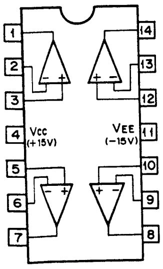
A0 — A10 ; ADDRESS INPUTS
CE ; CHIP ENABLE
OE ; OUTPUT ENABLE
WE ; WRITE ENABLE
I/O 1 — I/O 8 ; DATA INPUTS/OUTPUTS

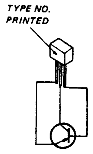

X ADDRESS BUFFER LATCH AND DECODER
E²PROM ARRAY (16,384x8)
A0-A8
Y ADDRESS BUFFER LATCH AND DECODER
DATA INPUT/OUTPUT BUFFER AND LATCH
CE 18
OE 20
WE 21
DATA CONTROL
I/O1 – I/O 8

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE
HI-Z; HIGH INPEDANCE

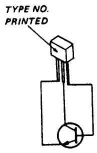
INPUT			MODE	I/O	POWER
$\overline{CE}$	$\overline{OE}$	$\overline{WE}$			
0	0	0	DISABLE	—	—
0	0	1	READ	DATA OUT	ACTIVE
0	1	0	WRITE	DATA IN	ACTIVE
0	1	1	DISABLE	—	—
1	X	X	STANDBY	HI-Z	STANDBY

TL084CN (TI)
OPERATIONAL AMPLIFIER
(J FET-INPUT)
— TOP VIEW —

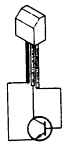

1
2
3
4
5
6
7
14
13
12
11
10
9
8
Vcc (+15V)
VEE (−15V)


TYPE NO. PRINTED

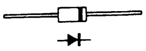
2SA1175F


TYPE NO. PRINTED

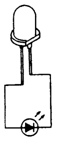
2SC2785E
2SC2785F



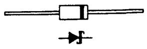
2SD774-4



1SS119

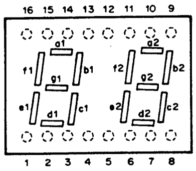


EBR5534S
SEL1810A
SLR54MC3
TLY-113AP

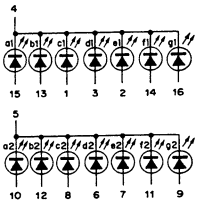


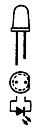
ERB81-004

DUAL 7-SEGMENT LED
— TOP VIEW —


16 15 14 13 12 11 10 9
a1
f1
b1
g1
e1
c1
d1
a2
f2
b2
g2
e2
c2
d2
1 2 3 4 5 6 7 8

LB402VK (ROHM)

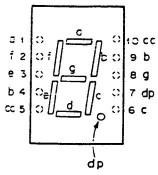

4
a1
b1
c1
d1
e1
f1
g1
15 13 1 3 2 14 16
5
a2
b2
c2
d2
e2
f2
g2
10 12 8 6 7 11 9

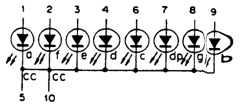


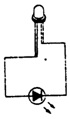
PY5504S : YELLOW

7-SEGMENT LED (RED)
— TOP VIEW —

SL- 7172 (SANYO)


a 1
f 2
e 3
b 4
cc 5
10 cc
9 b
8 g
7 dp
6 c
a
f
b
g
e
c
d
dp


1 2 3 4 6 7 8 9
a
f
e
d
c
dp
g
b
cc
cc
5 10



SLP281C-50 : GREEN

SECTION 7
SCHEMATIC DIAGRAMS

The circuit information is provided below

Circuit Board	Circuit Function
IF-167	VTR/MIXER Interface
SY-113	System Control
SW-231	VR/SWITCH Select
DET-3	Search Dial Detector
SW-232	Switch
CN-249	Connector Board
DP-77	Time Counter Display
MB-163	Mother Board
741-A	Switching Regulator
741-B	Switching Regulator

回路図内において、REF. NOの近傍に下記記号が記載されていますが、これは生産時の部品データです。

In the schematic diagrams, the following marks are described nearby reference number. These are parts data at factory.

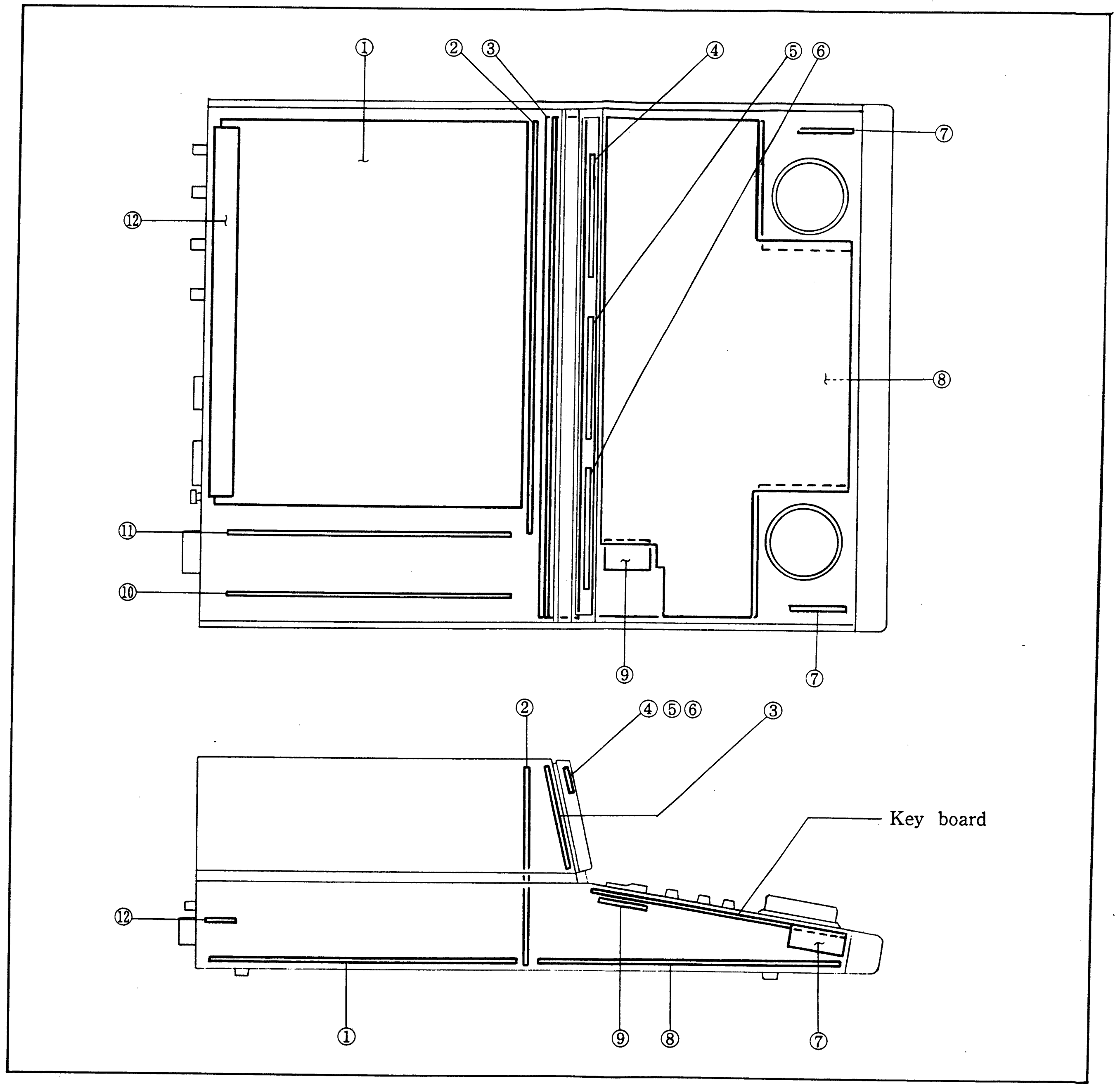
CAPACITOR (C)

AL	ELECTROLYTIC
AS	
TA	TANTALUM
CA	CERAMIC
CC	
CCS	
CM	
CS	
MPS	MYLAR
PP	
PS	
PT	
MD	DIPPED MICA
MS	MICA

RESISTOR (R)
VARIABLE RESISTOR (RV)

RC	CARBON
RD	
RF	FUSE
RN	METAL
RS	
RW	WIREWOUND

LOCATION OF THE PRINTED CIRCUIT BOARD

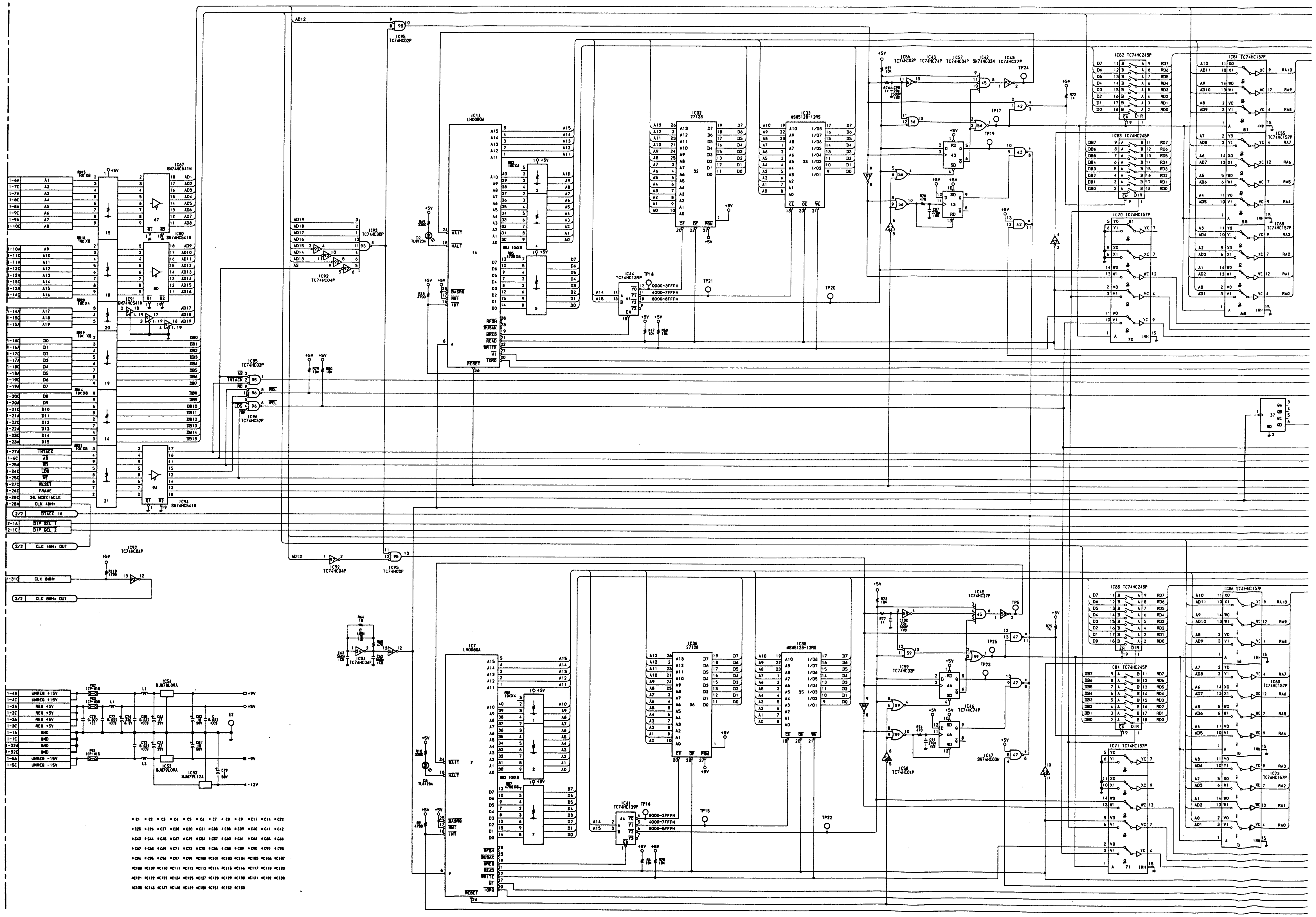


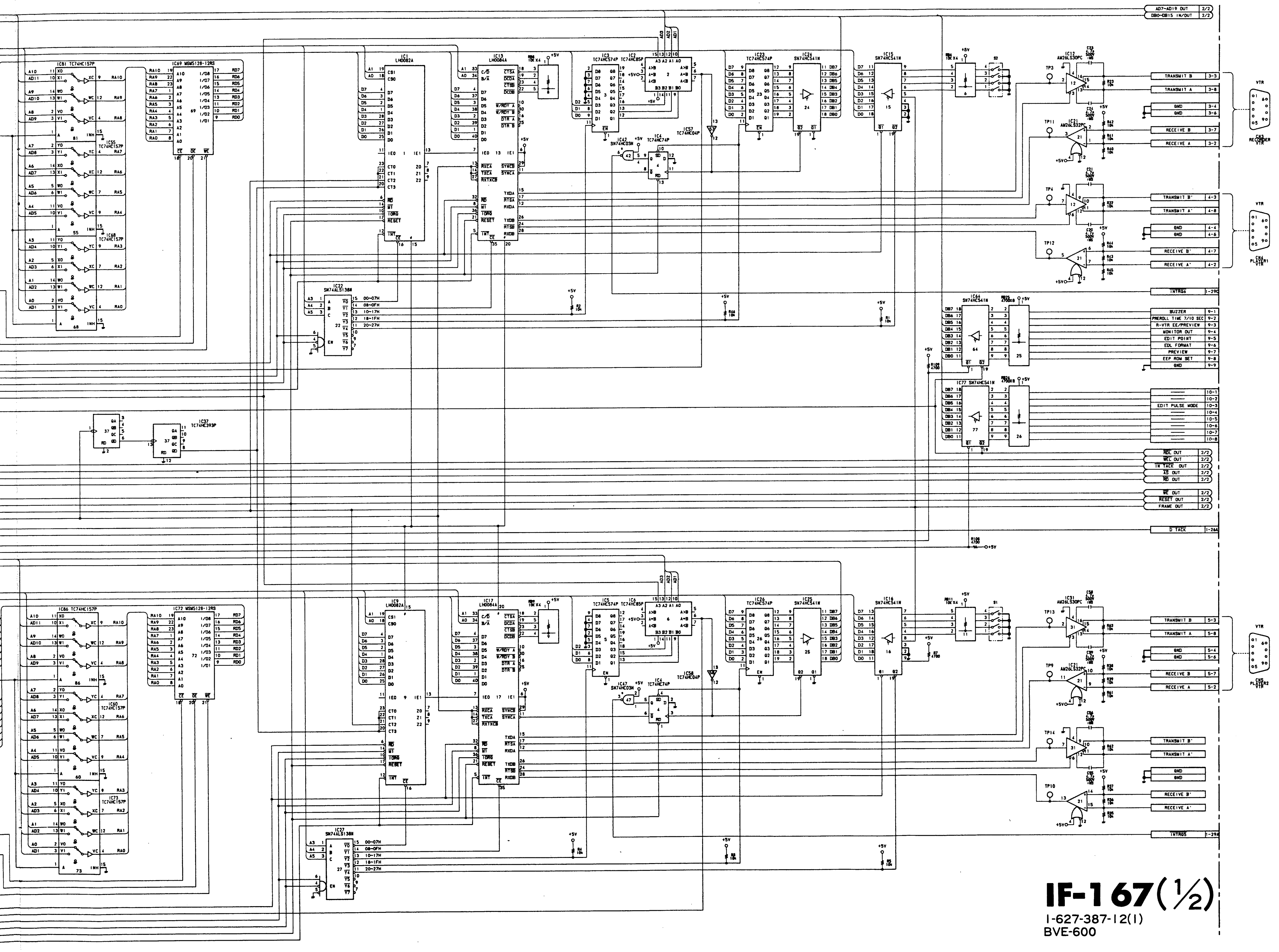
① IF-167
② MB-163
③ SW-231
④ DP-77 (R)
⑤ DP-77 (P2)
⑥ DP-77 (P1)
⑦ DET-3
⑧ SY-113
⑨ SW-232
⑫ CN-249

<Switching Regulator>
⑩ 741-B
⑪ 741-A

IF-167(1/2); VTR/MIXER INTERFACE

S/N UP TO 10597(UC)
S/N UP TO 10475(J)
S/N UP TO 11000(EK)


1
2
3
4
5
IC14 LH0080A
IC32 27128
IC33 MSM5128-12RS
IC7 LH0080A
IC36 27128
IC35 MSM5128-12RS
IC67 SN74HC541N
IC80 SN74HC541N
IC94 SN74HC541N
IC93 TC74HC30P
IC92 TC74HC04P
IC95 TC74HC02P
IC96 TC74HC32P
IC44 TC74HC139P
IC41 TC74HC139P
IC82 TC74HC245P
IC83 TC74HC245P
IC85 TC74HC245P
IC84 TC74HC245P
IC81 TC74HC157P
IC55 TC74HC157P
IC68 TC74HC157P
IC70 TC74HC157P
IC86 TC74HC157P
IC60 TC74HC157P
IC73 TC74HC157P
IC71 TC74HC157P
IC54 NJM78L09A
IC53 NJM78L09A
IC52 NJM79L12A
TP17
TP18
TP19
TP20
TP21
TP24
TP5
TP15
TP16
TP22
TP23
TP25
0000~3FFFH
4000~7FFFH
8000~BFFFH
UNREG +15V
REG +5V
GND
UNREG -15V
+9V
+5V
-9V
-12V
INTACK
RESET
FRAME
CLK 4MHz
DTACK IN
DIP SEL 1
DIP SEL 2
CLK 4MHz OUT
CLK 8MHz
CLK 8MHz OUT
A
B
C
D
E
F
G
H

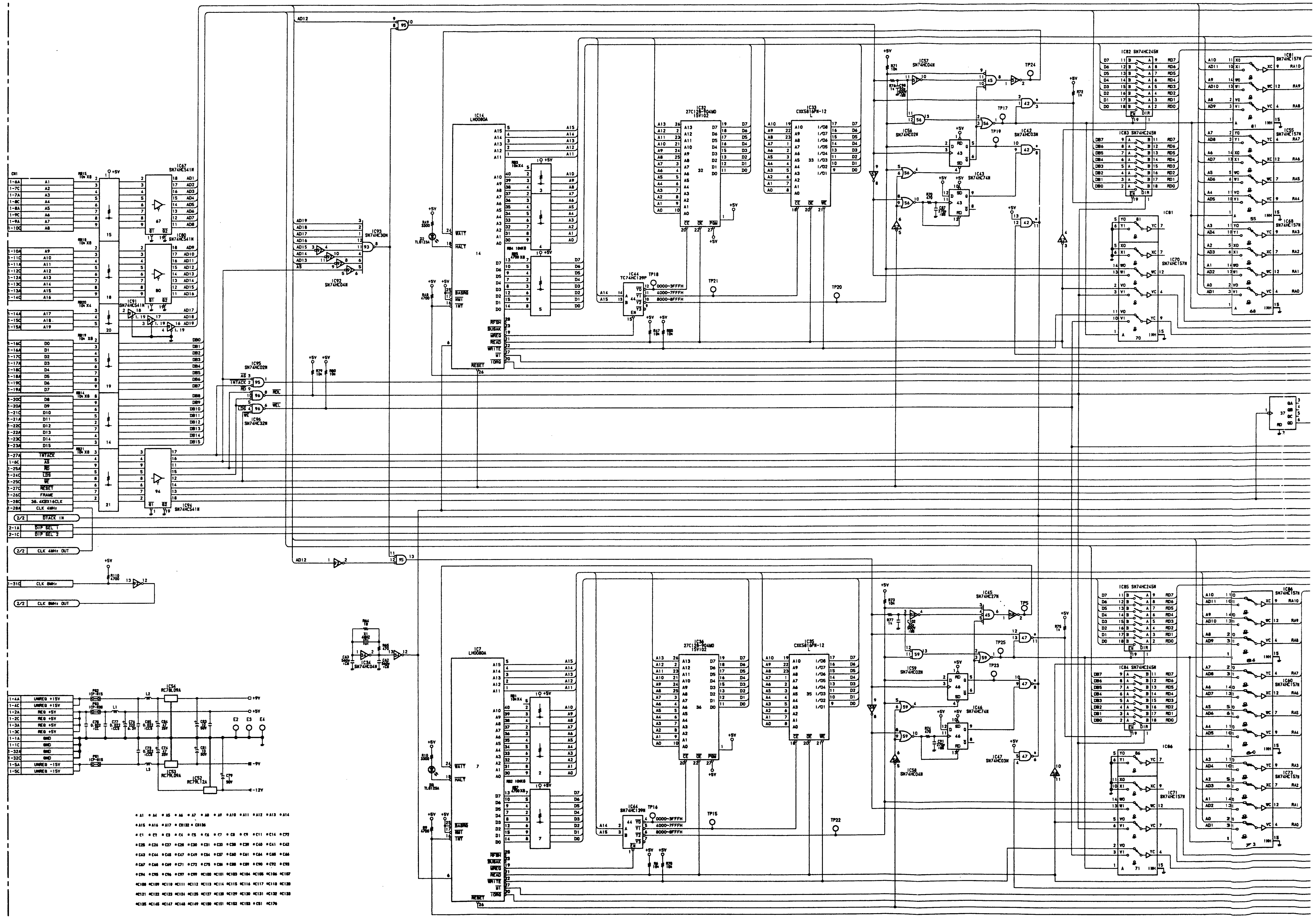

AD7~AD19 OUT 2/2
DB0~DB15 IN/OUT 2/2
IC61 TC74HC157P
IC55 TC74HC157P
IC68 TC74HC157P
IC69 MSM5128-12RS
IC1 LH0082A
IC13 LH0084A
IC3 TC74HC574P
IC2 TC74HC85P
IC23 TC74HC574P
IC24 SN74HC541N
IC15 SN74HC541N
IC17 AM26LS30PC
IC21 AM26LS30PC
IC22 SN74LS138N
IC4 TC74HC74P
IC42 SN74HC03N
IC57 TC74HC04P
IC64 SN74HC541N
IC77 SN74HC541N
IC37 TC74HC393P
IC66 TC74HC157P
IC60 TC74HC157P
IC73 TC74HC157P
IC72 MSM5128-12RS
IC9 LH0082A
IC17 LH0084A
IC5 TC74HC574P
IC6 TC74HC85P
IC26 TC74HC574P
IC25 SN74HC541N
IC16 SN74HC541N
IC31 AM26LS30PC
IC47 SN74HC03N
IC58 TC74HC04P
IC27 SN74ALS138N
TRANSMIT B 3-3
TRANSMIT A 3-8
GND 3-4
GND 3-6
RECEIVE B 3-7
RECEIVE A 3-2
CN3 RECORDER VTR
TRANSMIT B' 4-3
TRANSMIT A' 4-8
GND 4-4
GND 4-6
RECEIVE B' 4-7
RECEIVE A' 4-2
CN4 PLAYER1 VTR
INTRQ6 1-29C
BUZZER 9-1
PREROLL TIME 7/10 SEC 9-2
R-VTR EE/PREVIEW 9-3
MONITOR OUT 9-4
EDIT POINT 9-5
EDL FORMAT 9-6
PREVIEW 9-7
EEP ROM SET 9-8
GND 9-9
EDIT PULSE MODE
10-1
10-2
10-3
10-4
10-5
10-6
10-7
10-8
RDL OUT 2/2
WRL OUT 2/2
IN TACK OUT 2/2
AS OUT 2/2
RD OUT 2/2
WE OUT 2/2
RESET OUT 2/2
FRAME OUT 2/2
D TACK 1-26A
TRANSMIT B 5-3
TRANSMIT A 5-8
GND 5-4
GND 5-6
RECEIVE B 5-7
RECEIVE A 5-2
CN5 PLAYER2 VTR
TRANSMIT B'
TRANSMIT A'
GND
GND
RECEIVE B'
RECEIVE A'
INTRQ5 1-29A
+5V
TP3
TP4
TP9
TP10
TP11
TP12
TP13
TP14
7-7(a)
7-8(a)
I
J
K
L
M
N
O
P

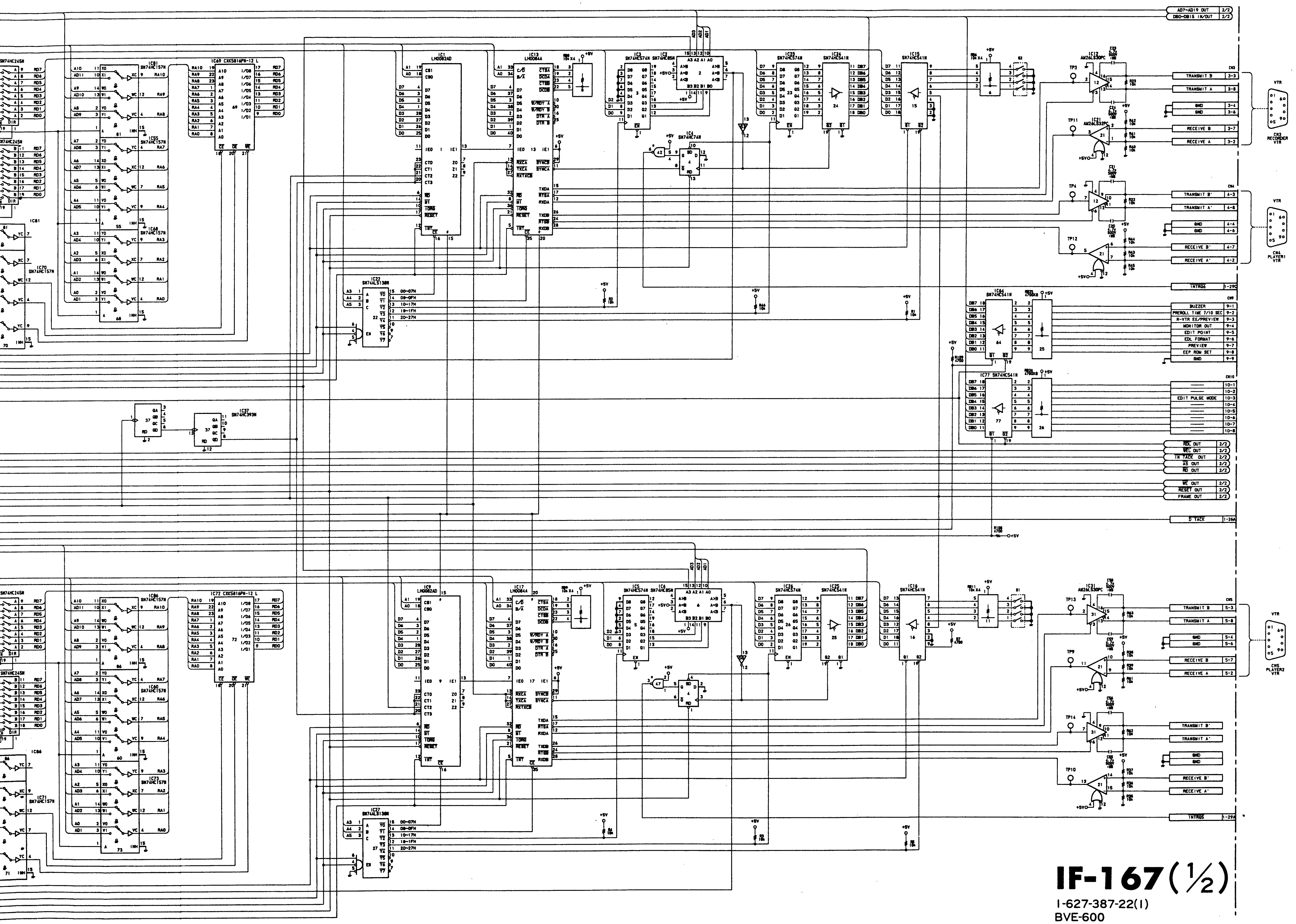
IF-167(½)

1-627-387-12(1)
BVE-600

IF-167(1/2); VTR/MIXER INTERFACE

S/N 20001 AND HIGHER(UC)
S/N 20001 AND HIGHER(J)
S/N 20001 AND HIGHER(EK)


IC14 LH0080A
IC7 LH0080A
IC32 27C128-90AMD
IC36 27C128-90AMD
IC33 CXK5816PM-12
IC35 CXK5816PM-12
IC67 SN74HC541N
IC80 SN74HC541N
IC94 SN74HC541N
IC82 SN74HC245N
IC83 SN74HC245N
IC85 SN74HC245N
IC84 SN74HC245N
IC81 SN74HC157N
IC55 SN74HC157N
IC68 SN74HC157N
IC70 SN74HC157N
IC86
IC71 SN74HC157N
IC60 SN74HC157N
IC73 SN74HC157N
IC95 SN74HC02N
IC96 SN74HC32N
IC93 SN74HC30N
IC92 SN74HC04N
IC57 SN74HC04N
IC56 SN74HC02N
IC43 SN74HC74N
IC42 SN74HC03N
IC44 TC74HC139P
IC54 RC78L09A
IC53 RC79L09A
IC52 RC79L12A
TP15
TP16
TP17
TP18
TP19
TP20
TP21
TP22
TP23
TP24
TP25
TP26
CLK 4MHz
CLK 8MHz
CLK 8MHz OUT
CLK 4MHz OUT
DTACK IN
DTP SEL 1
DTP SEL 2
RESET
FRAME
UNREG +15V
UNREG -15V
REG +5V
GND
+9V
+5V
-9V
-12V
E2
E3
E4
0000~3FFFH
4000~7FFFH
8000~BFFFH
1
2
3
4
5
A
B
C
D
E
F
G
H


AD7~AD19 OUT
DB0~DB15 IN/OUT
TRANSMIT B
TRANSMIT A
GND
RECEIVE B
RECEIVE A
CN3
RECORDER VTR
TRANSMIT B'
TRANSMIT A'
RECEIVE B'
RECEIVE A'
CN4
PLAYER1 VTR
INTRQ6
CN9
BUZZER
PREROLL TIME 7/10 SEC
R-VTR EE/PREVIEW
MONITOR OUT
EDIT POINT
EDL FORMAT
PREVIEW
EEP ROM SET
CN10
EDIT PULSE MODE
RDL OUT
WEL OUT
IN TACK OUT
AS OUT
RD OUT
WE OUT
RESET OUT
FRAME OUT
D TACK
CN5
PLAYER2 VTR
INTRQ5
IC1 LH0082AD
IC13 LH0084A
IC9 LH0082AD
IC17 LH0084A
IC22 SN74LS138N
IC27 SN74LS138N
IC69 CXK5816PN-12 L
IC72 CXK5816PN-12 L
IC37 SN74HC393N
IC64 SN74HC541N
IC77 SN74HC541N
IC12 AM26LS30PC
IC21 AM26LS32PC
IC31 AM26LS30PC

IF-167(1/2)

1-627-387-22(1)
BVE-600

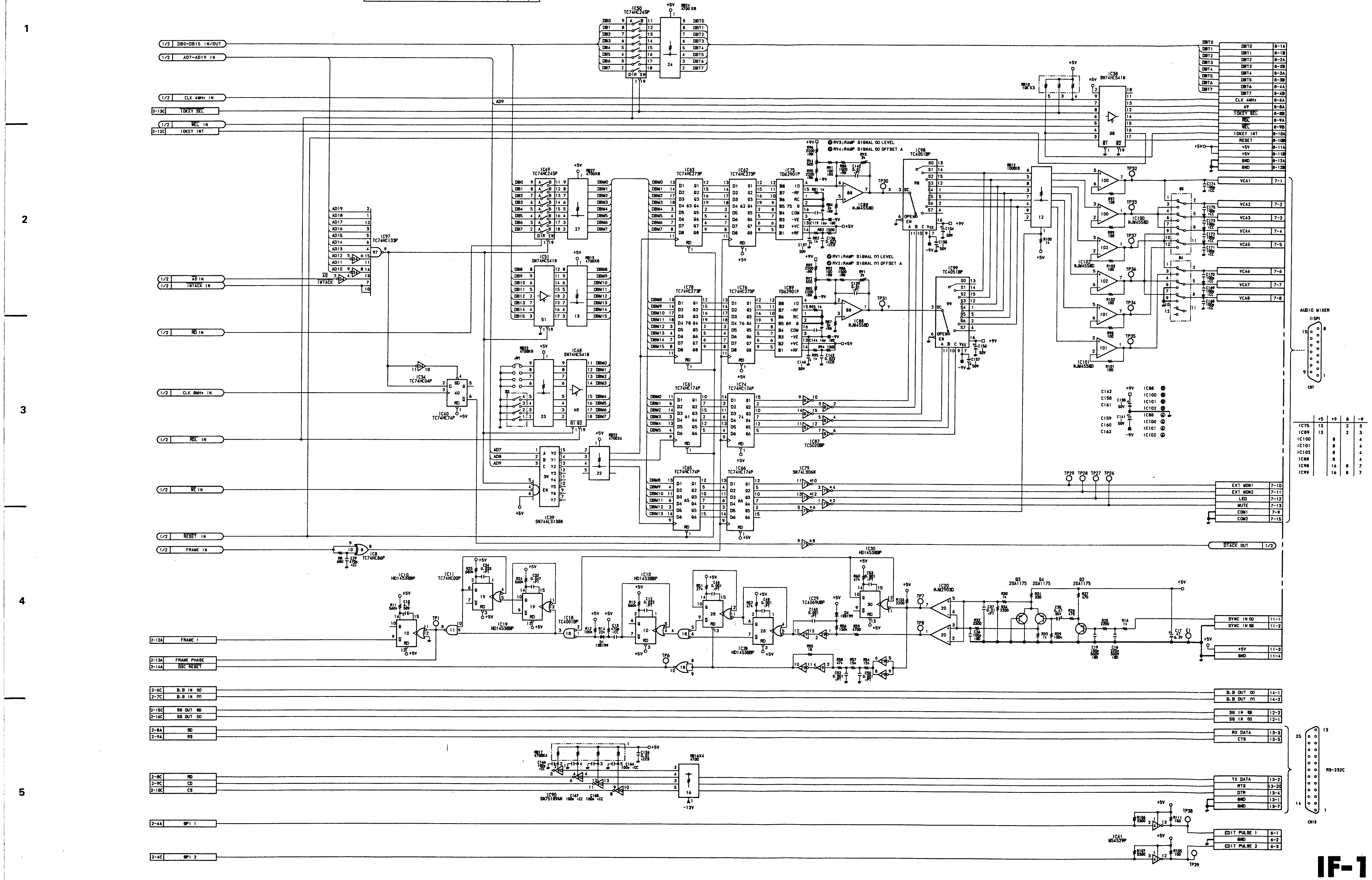
7-7 (b)

7-8 (b)

H I J K L M N O P

IF-167(2/2); VTR/MIXER INTERFACE

S/N UP TO 10597(UC)
S/N UP TO 10475(J)
S/N UP TO 11000(EK)


1
2
3
4
5
1/2 DB0-DB15 IN/OUT
1/2 AD7-AD19 IN
1/2 CLK 4MHz IN
2-13C TOKEY SEL
1/2 WEL IN
2-12C TOKEY INT
1/2 AS IN
1/2 INTACK IN
1/2 RD IN
1/2 CLK 8MHz IN
1/2 RDL IN
1/2 WE IN
1/2 RESET IN
1/2 FRAME IN
2-12A FRAME 1
2-13A FRAME PHASE
2-14A OSC RESET
2-6C B.B IN (X)
2-7C B.B IN (Y)
2-15C SB OUT (X)
2-16C SB OUT (X)
2-8A SD
2-9A RS
2-8C RD
2-9C CD
2-10C CS
2-4A GPI 1
2-4C GPI 2
IC50 TC74HC245P
IC49 TC74HC245P
IC51 SN74HC541N
IC48 SN74HC541N
IC97 TC74HC133P
IC34 TC74HC04P
IC40 TC74HC74P
IC39 SN74ALS138N
IC63 TC74HC273P
IC62 TC74HC273P
IC78 TC74HC273P
IC76 TC74HC273P
IC61 TC74HC174P
IC74 TC74HC174P
IC65 TC74HC174P
IC66 TC74HC174P
IC75 TDA62901P
IC89 TDA62901P
IC88 NJM4558D
IC98 TC4051BP
IC99 TC4051BP
IC38 SN74HC541N
IC100 NJM4558D
IC101 NJM4558D
IC102 NJM4558D
IC87 TC5020BP
IC79 SN74LS06N
IC8 TC74HC86P
IC10 HD14538BP
IC11 TC74HC00P
IC19 HD14538BP
IC18 TC4001BP
IC28 HD14538BP
IC29 TC4069UBP
IC30 HD14538BP
IC20 NJM2903D
Q3 2SA1175
Q4 2SA1175
Q2 2SA1175
IC90 SN75189AN
IC41 M5432P
RV3; RAMP SIGNAL (X) LEVEL
RV4; RAMP SIGNAL (X) OFFSET A
RV1; RAMP SIGNAL (Y) LEVEL
RV2; RAMP SIGNAL (Y) OFFSET A
DBT0 8-1A
DBT1 8-1B
DBT2 8-2A
DBT3 8-2B
DBT4 8-3A
DBT5 8-3B
DBT6 8-4A
DBT7 8-4B
CLK 4MHz 8-6A
A9 8-6B
TOKEY SEL 8-8B
RDL 8-9A
WEL 8-9B
TOKEY INT 8-10A
RESET 8-10B
+5V 8-11A
+5V 8-11B
GND 8-12A
GND 8-12B
VCA1 7-1
VCA2 7-2
VCA3 7-3
VCA4 7-4
VCA5 7-5
VCA6 7-6
VCA7 7-7
VCA8 7-8
AUDIO MIXER (15P)
CN7
EXT MON1 7-10
EXT MON2 7-11
LED 7-12
MUTE 7-13
COM1 7-9
COM2 7-15
DTACK OUT 1/2
SYNC IN (X) 11-1
SYNC IN (Y) 11-2
+5V 11-3
GND 11-4
B.B OUT (X) 14-1
B.B OUT (Y) 14-2
SB IN (Y) 12-2
SB IN (X) 12-1
RX DATA 13-3
CTS 13-5
TX DATA 13-2
RTS 13-20
DTR 13-4
GND 13-1
GND 13-7
RS-232C
CN13
EDIT PULSE 1 6-1
GND 6-2
EDIT PULSE 2 6-3
TP26
TP27
TP28
TP29
TP30
TP31
TP32
TP33
TP34
TP35
TP36
TP37
TP38
TP39
-12V

	+5	+9	0	-9
IC75	13		2	3
IC89	13		2	3
IC100		8		4
IC101		8		4
IC102		8		4
IC88		8		4
IC98		16	8	7
IC99		16	8	7

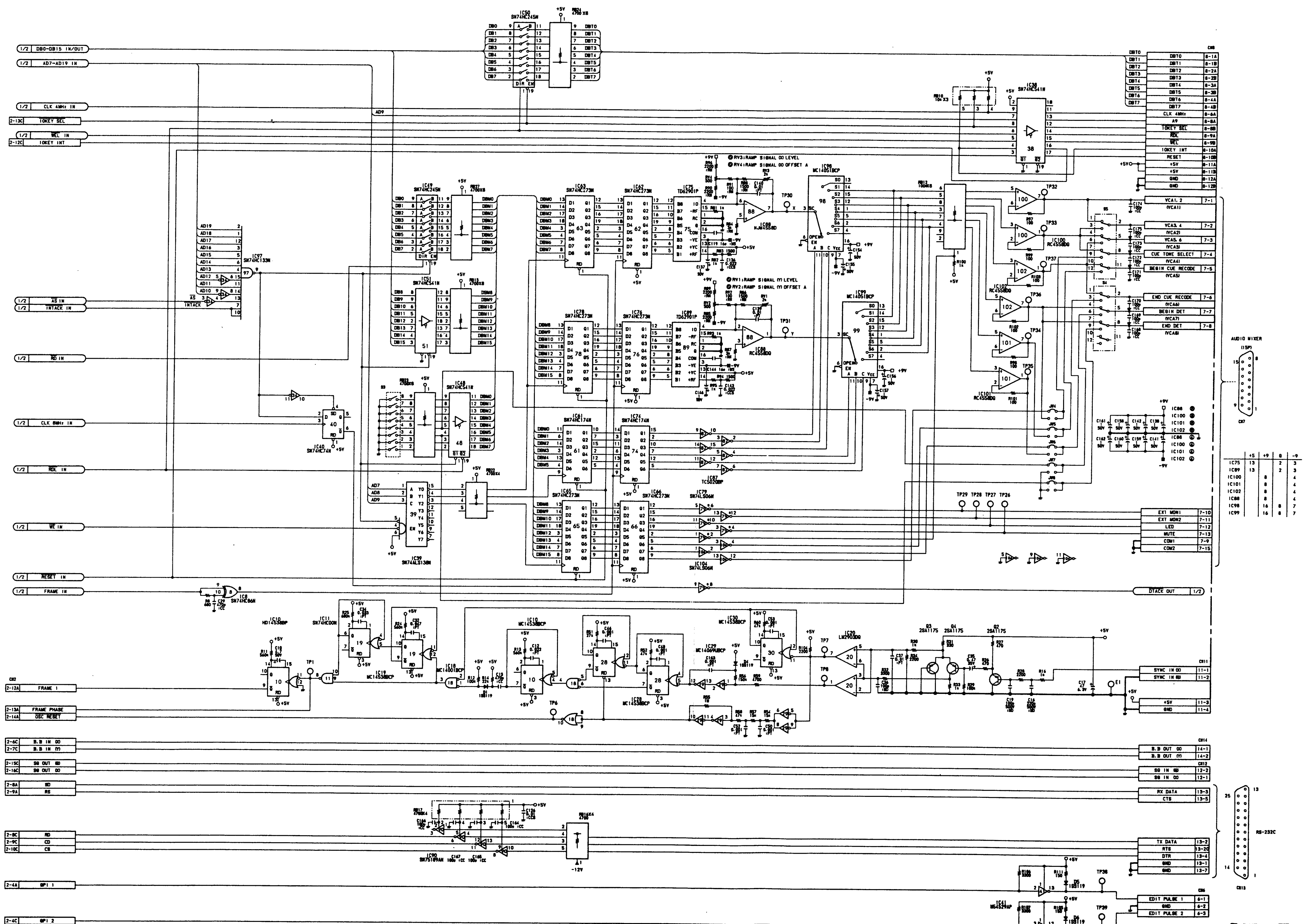
IF-167(2/2)

1-627-387-12(1)
BVE-600

A | B | C | D | E | F | G | H

IF-167(2/2); VTR/MIXER INTERFACE

S/N 20001 AND HIGHER(UC)
S/N 20001 AND HIGHER(J)
S/N 20001 AND HIGHER(EK)

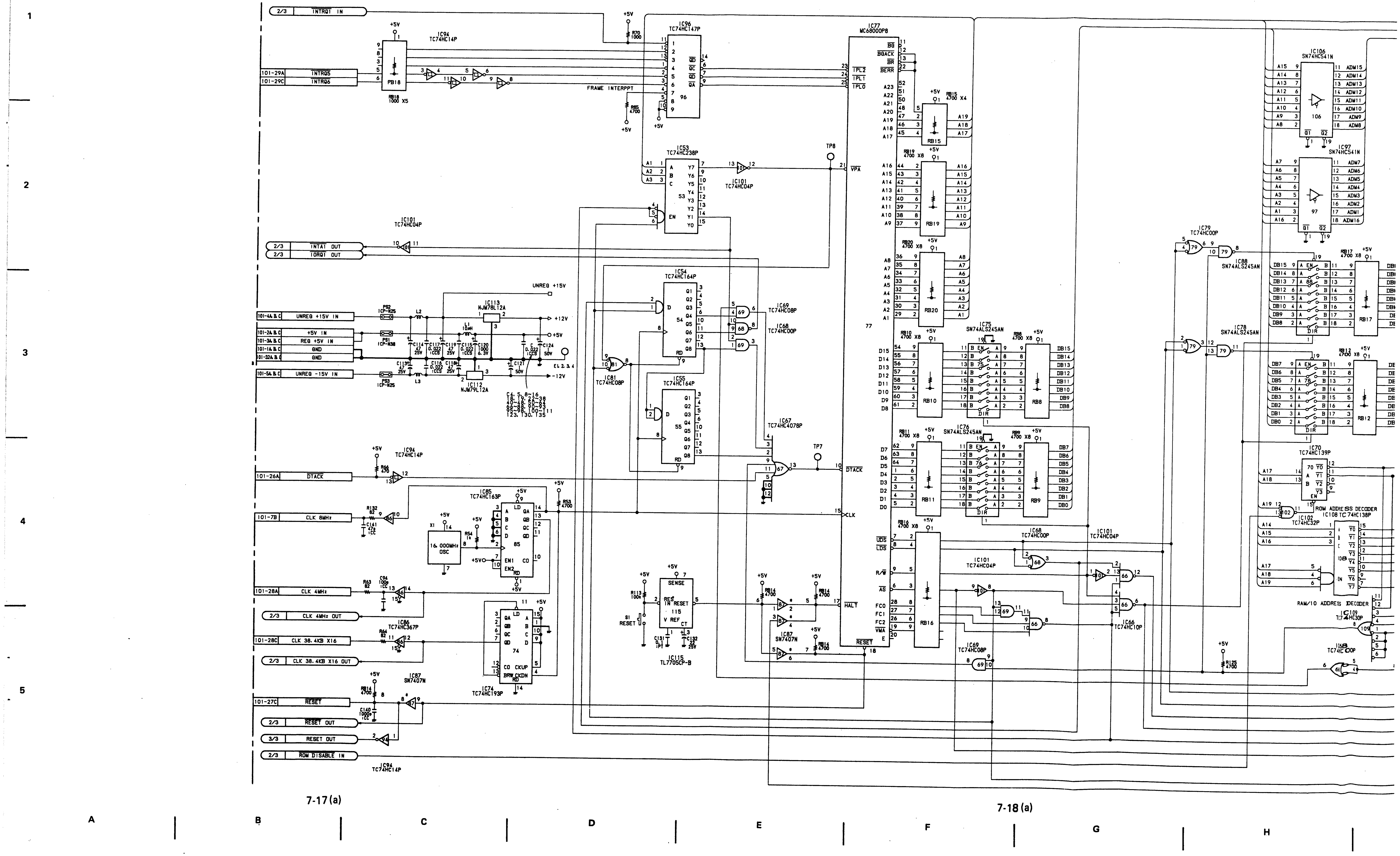

1/2 DB0~DB15 IN/OUT
1/2 AD7~AD19 IN
1/2 CLK 4MHz IN
2-13C IOKEY SEL
1/2 WEL IN
2-12C IOKEY INT
1/2 AS IN
1/2 INTACK IN
1/2 RD IN
1/2 CLK 8MHz IN
1/2 RDL IN
1/2 WE IN
1/2 RESET IN
1/2 FRAME IN
CN2
2-12A FRAME 1
2-13A FRAME PHASE
2-14A OSC RESET
2-6C B.B IN (X)
2-7C B.B IN (Y)
2-15C SG OUT (W)
2-16C SG OUT (X)
2-8A SD
2-9A RS
2-8C RD
2-9C CD
2-10C CS
2-4A GPI 1
2-4C GPI 2
CN8
DBT0 8-1A
DBT1 8-1B
DBT2 8-2A
DBT3 8-2B
DBT4 8-3A
DBT5 8-3B
DBT6 8-4A
DBT7 8-4B
CLK 4MHz 8-6A
A9 8-8A
IOKEY SEL 8-8B
RDL 8-9A
WEL 8-9B
IOKEY INT 8-10A
RESET 8-10B
+5V 8-11A
+5V 8-11B
GND 8-12A
GND 8-12B
VCA1, 2 7-1
(VCA1)
VCA3, 4 7-2
(VCA2)
VCA5, 6 7-3
(VCA3)
CUE TONE SELECT 7-4
(VCA4)
BEGIN CUE RECODE 7-5
(VCA5)
END CUE RECODE 7-6
(VCA6)
BEGIN DET 7-7
(VCA7)
END DET 7-8
(VCA8)
S5
S4
AUDIO MIXER
(15P)
CN7
+9V
IC88 IC100 IC101 IC102
-9V
+5 +9 0 -9
IC75 13 2 3
IC89 13 2 3
IC100 8 4
IC101 8 4
IC102 8 4
IC88 8 4
IC98 16 8 7
IC99 16 8 7
EXT MON1 7-10
EXT MON2 7-11
LED 7-12
MUTE 7-13
COM1 7-9
COM2 7-15
DTACK OUT 1/2
CN11
SYNC IN (X) 11-1
SYNC IN (B) 11-2
+5V 11-3
GND 11-4
CN14
B.B OUT (X) 14-1
B.B OUT (Y) 14-2
CN12
SG IN (W) 12-2
SG IN (X) 12-1
RX DATA 13-3
CTS 13-5
TX DATA 13-2
RTS 13-20
DTR 13-4
GND 13-1
GND 13-7
RS-232C
CN13
CN6
EDIT PULSE 1 6-1
GND 6-2
EDIT PULSE 2 6-3
TP26 TP27 TP28 TP29 TP30 TP31 TP32 TP33 TP34 TP35 TP36 TP37 TP38 TP39
RY3: RAMP SIGNAL (X) LEVEL
RY4: RAMP SIGNAL (X) OFFSET A
RY1: RAMP SIGNAL (Y) LEVEL
RY2: RAMP SIGNAL (Y) OFFSET A
IC50 SN74HC245N
IC49 SN74HC245N
IC51 SN74HC541N
IC48 SN74HC541N
IC38 SN74HC541N
IC63 SN74HC273N
IC62 SN74HC273N
IC78 SN74HC273N
IC76 SN74HC273N
IC61 SN74HC174N
IC74 SN74HC174N
IC65 SN74HC273N
IC66 SN74HC273N
IC75 TDA2901P
IC89 TDA2901P
IC88 NJM4558D
IC98 MC14051BCP
IC99 MC14051BCP
IC100 RC4558DD
IC102 RC4558DD
IC101 RC4558DD
IC97 SN74HC133N
IC40 SN74HC74N
IC39 SN74ALS138N
IC87 TC5058BP
IC79 SN74LS06N
IC104 SN74LS06N
IC68 SN74HC86N
IC10 HD14538BP
IC11 SN74HC00N
IC19 MC14538BCP
IC18 MC14001BCP
IC28 MC14538BCP
IC29 MC14069UBCP
IC30 MC14538BCP
IC20 LM2903D
IC90 SN75189AN
IC41 M54529AP
Q1 2SA1175 Q2 2SA1175 Q3 2SA1175
-12V
1
2
3
4
5
A B C D E F G H

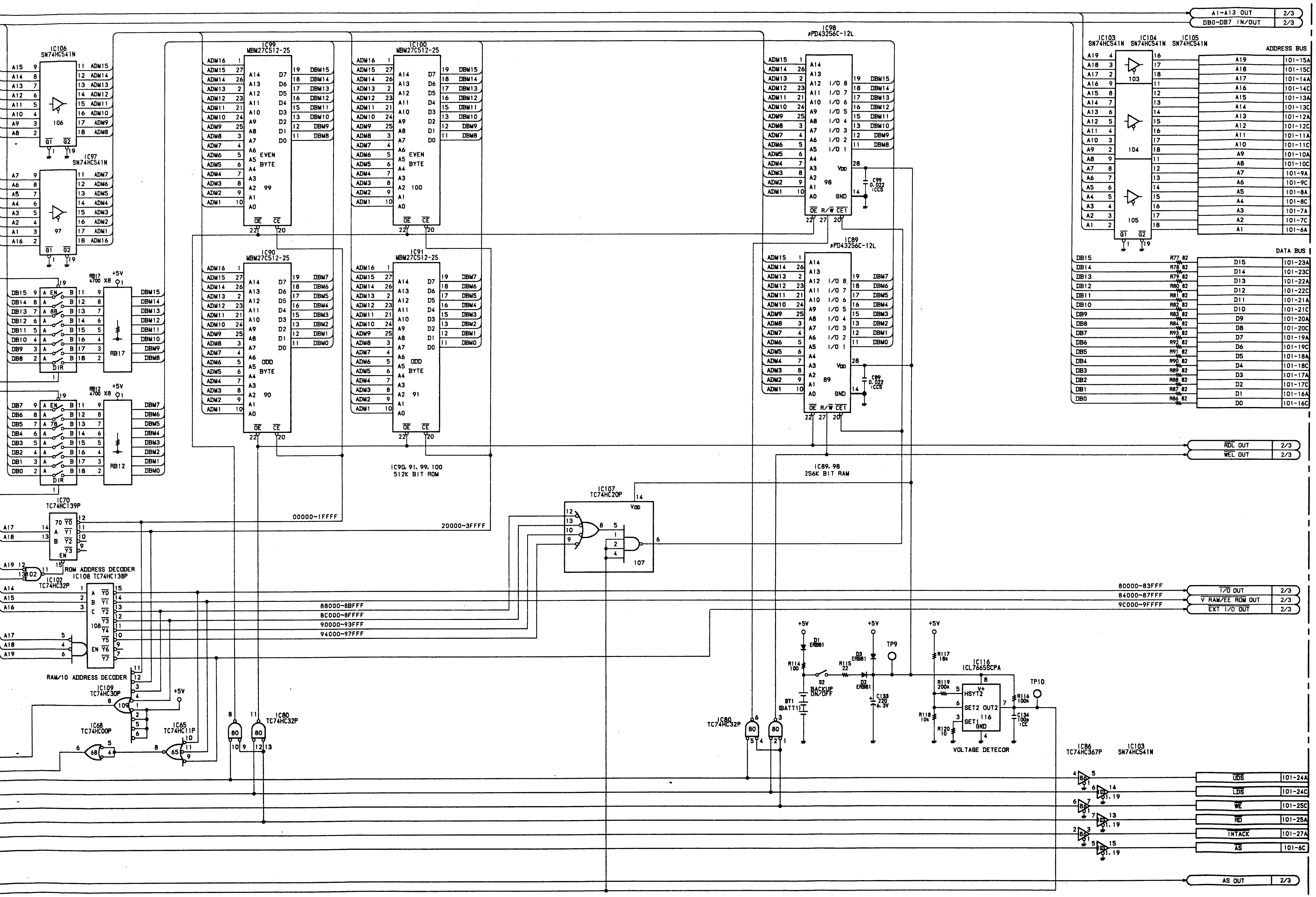
IF-167(2/2)

1-627-387-22(1)
BVE-600

SY-113(1/3); SYSTEM CONTROL

S/N UP TO 10597(UC)
S/N UP TO 10475(J)
S/N UP TO 11000(EK)

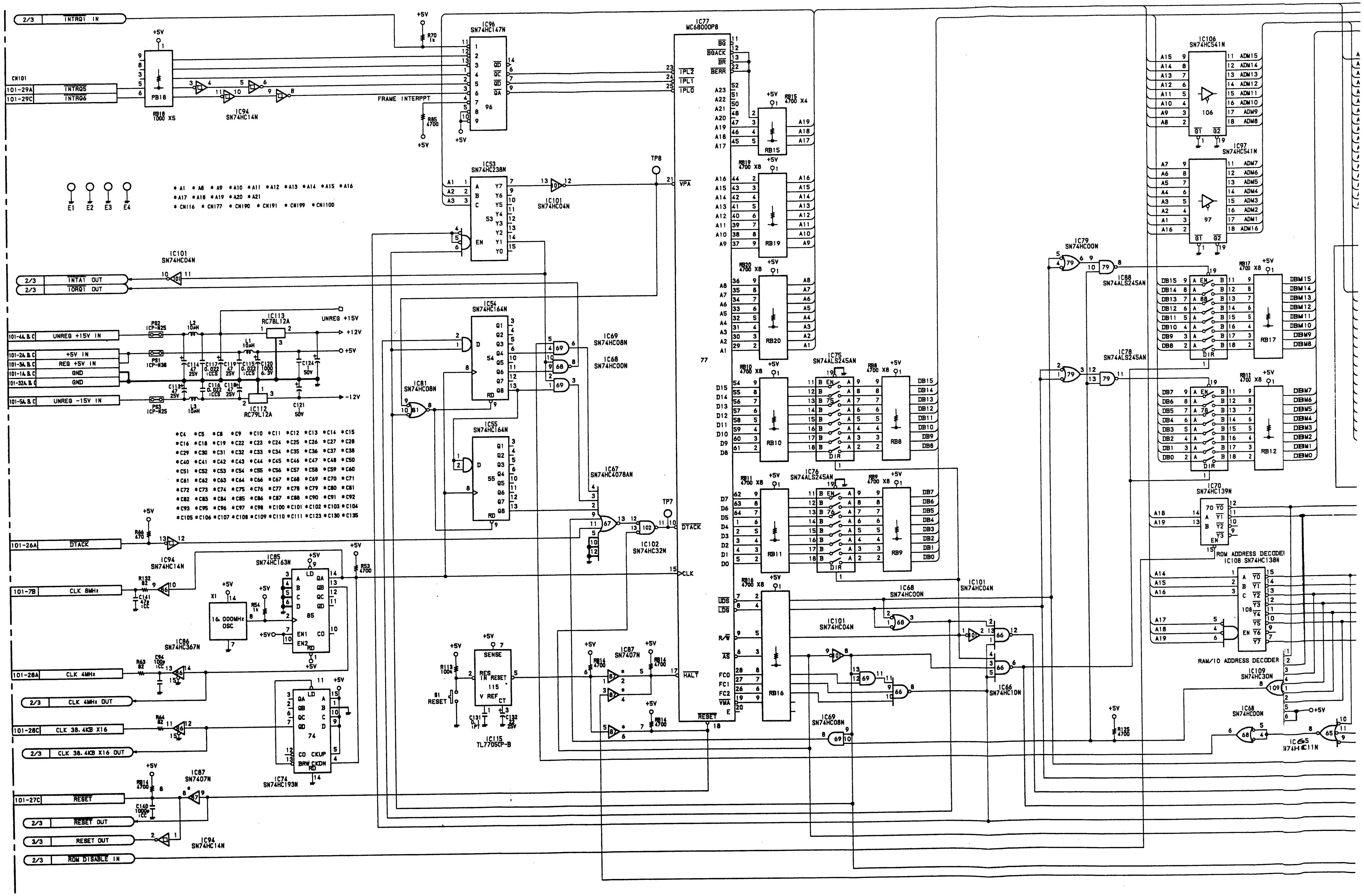

2/3 INTRQ1 IN
101-29A INTRQ5
101-29C INTRQ6
IC94 TC74HC14P
RB18 1000 X5
IC96 TC74HC147P
R70 1000
R65 4700
FRAME INTERRUPT
IC77 MC68000P8
BG
BGACK
BR
BERR
IPL2
IPL1
IPL0
VPA
DTACK
CLK
HALT
RESET
UDS
LDS
R/W
AS
FC0
FC1
FC2
VMA
E
RB15 4700 X4
RB19 4700 X8
RB20 4700 X8
RB10 4700 X8
RB11 4700 X8
RB16 4700 X8
RB8 4700 X8
RB9 4700 X8
IC75 SN74ALS245AN
IC76 SN74ALS245AN
IC53 TC74HC238P
IC101 TC74HC04P
TP8
TP7
2/3 INTAT OUT
2/3 IORQ1 OUT
IC54 TC74HC164P
IC55 TC74HC164P
IC69 TC74HC08P
IC68 TC74HC00P
IC67 TC74HC4078P
IC81 TC74HC08P
UNREG +15V
101-4A,B,C UNREG +15V IN
101-2A,B,C +5V IN
101-3A,B,C REG +5V IN
101-1A,B,C GND
101-32A,B,C GND
101-5A,B,C UNREG -15V IN
PS2 ICP-N25
PS1 ICP-N38
PS3 ICP-N25
L2
L3
L1 10µH
IC113 NJM78L12A
IC112 NJM79L12A
+12V
+5V
-12V
EL 2, 3, 4
C4, 5, 8~16, 18, 19, 22~38, 40~48, 50~63, 66~88, 90~93, 95~98, 100~111, 123, 130, 135
101-26A DTACK
R66 470
IC85 TC74HC163P
R53 4700
101-7B CLK 8MHz
R132 82
C141 47p
X1 16.000MHz OSC
R54 1k
101-28A CLK 4MHz
R63 82
2/3 CLK 4MHz OUT
IC86 TC74HC367P
101-28C CLK 38.4KB X16
R64 82
2/3 CLK 38.4KB X16 OUT
IC74 TC74HC193P
101-27C RESET
RB14 4700
C140 1000p
IC87 SN7407N
2/3 RESET OUT
3/3 RESET OUT
2/3 ROM DISABLE IN
IC115 TL7705CP-B
SENSE
RESET
REF
CT
R113 100k
S1 RESET
C131
C132
IC106 SN74HC541N
IC97 SN74HC541N
ADM0–ADM16
IC79 TC74HC00P
IC88 SN74ALS245AN
IC78 SN74ALS245AN
RB17 4700 X8
RB12 4700 X8
DB0–DB15
DIR
IC70 TC74HC139P
ROM ADDRESS DECODER
IC108 TC74HC138P
IC102 TC74HC32P
RAM/IO ADDRESS DECODER
IC109 TC74HC30P
IC66 TC74HC10P
R125 4700
1
2
3
4
5
A
B
C
D
E
F
G
H


IC106 SN74HC541N
IC97 SN74HC541N
IC99 MBM27C512-25
EVEN BYTE
IC100 MBM27C512-25
IC90 MBM27C512-25
ODD BYTE
IC91 MBM27C512-25
IC90, 91, 99, 100
512K BIT ROM
IC98 µPD43256C-12L
IC89 µPD43256C-12L
IC89, 98
256K BIT RAM
RB17 4700 X8
RB12 4700 X8
+5V
IC70 TC74HC139P
00000~1FFFF
20000~3FFFF
ROM ADDRESS DECODER
IC102 TC74HC32P
IC108 TC74HC138P
RAM/IO ADDRESS DECODER
88000~8BFFF
8C000~8FFFF
90000~93FFF
94000~97FFF
IC107 TC74HC20P
IC109 TC74HC30P
IC68 TC74HC00P
IC65 TC74HC11P
IC80 TC74HC32P
A1~A13 OUT 2/3
DB0~DB7 IN/OUT 2/3
IC103 SN74HC541N
IC104 SN74HC541N
IC105 SN74HC541N
ADDRESS BUS
DATA BUS
RDL OUT 2/3
WEL OUT 2/3
80000~83FFF
84000~87FFF
9C000~9FFFF
I/O OUT 2/3
V RAM/EE ROM OUT 2/3
EXT I/O OUT 2/3
D1 ERB81
R114 100
S2 BACKUP ON/OFF
BT1 (BATT1)
R115 22
D3 ERB81
D2 ERB81
C133 220 6.3V
TP9
R117 18k
IC116 ICL7665SCPA
R119 200k
R118 10k
R120 10
R116 100k
C134 100p :CC
TP10
VOLTAGE DETECOR
C99 0.022 :CCS
C89 0.022 :CCS
IC86 TC74HC367P
IC103 SN74HC541N
UDS 101-24A
LDS 101-24C
WE 101-25C
RD 101-25A
INTACK 101-27A
AS 101-6C
AS OUT 2/3

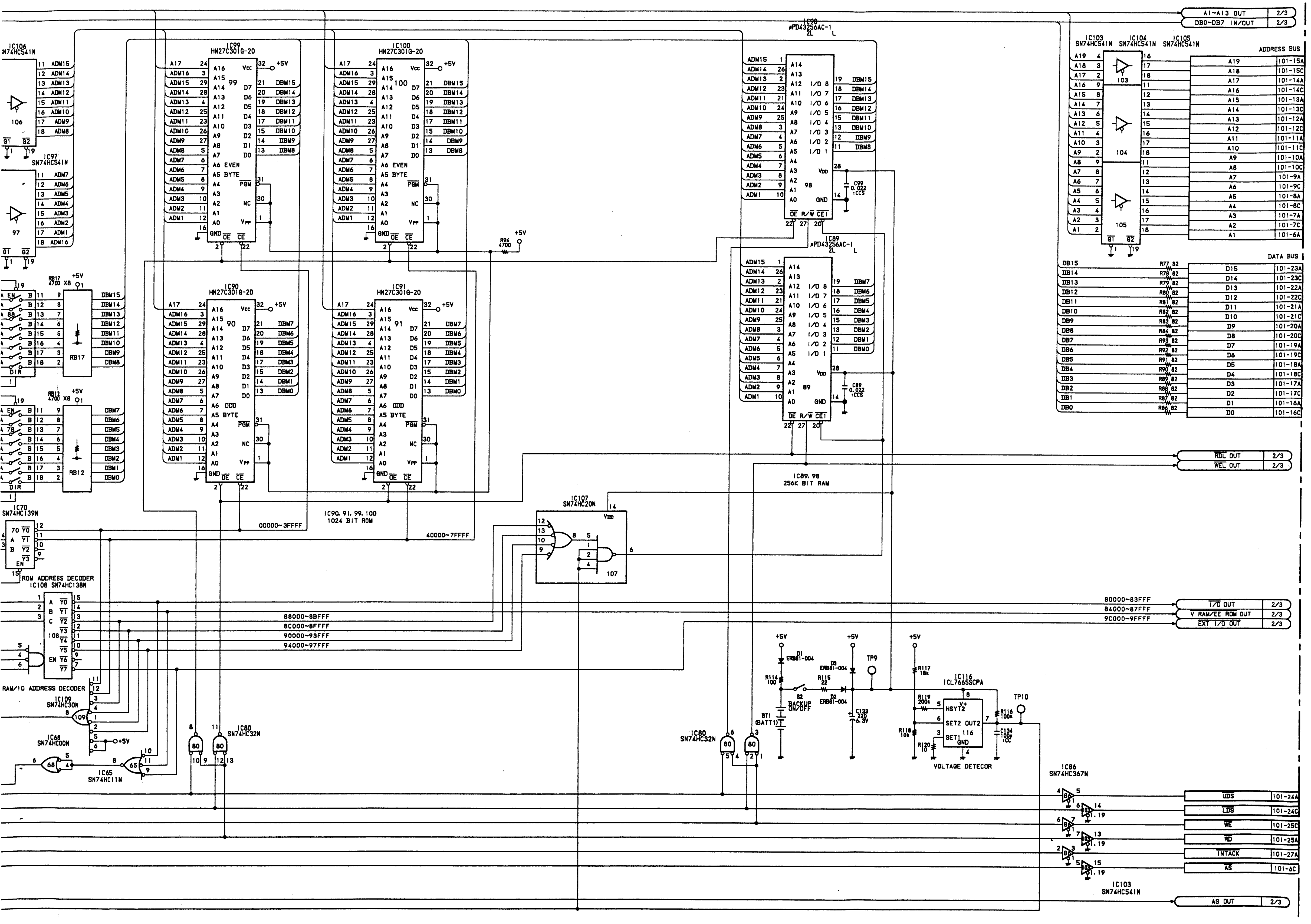
SY-113(1/3)
1-627-386-12(1)
BVE-600

SY-113(1/3); SYSTEM CONTROL

S/N 20001 AND HIGHER(UC)
S/N 20001 AND HIGHER(J)
S/N 20001 AND HIGHER(EK)



INTRQ1 IN
CN101
INTRQ5
INTRQ6
RB18 1000 X5
IC94 SN74HC14N
IC96 SN74HC147N
FRAME INTERPPT
R70 1k
R85 4700
IC77 MC68000P8
BG
BGACK
BR
BERR
IPL2
IPL1
IPL0
VPA
DTACK
CLK
HALT
RESET
UDS
LDS
R/W
AS
FC0
FC1
FC2
VMA
E
IC53 SN74HC238N
IC101 SN74HC04N
TP8
TP7
E1 E2 E3 E4
INTA1 OUT
TORQ1 OUT
IC113 RC78L12A
IC112 RC79L12A
UNREG +15V
+12V
+5V
-12V
UNREG +15V IN
+5V IN
REG +5V IN
GND
UNREG -15V IN
PS2 ICP-N25
PS1 ICP-N38
PS3 ICP-N25
IC54 SN74HC164N
IC55 SN74HC164N
IC69 SN74HC08N
IC68 SN74HC00N
IC81 SN74HC08N
IC67 SN74HC4078AN
IC102 SN74HC32N
DTACK
IC85 SN74HC163N
X1 16.000MHz OSC
CLK 8MHz
CLK 4MHz
CLK 4MHz OUT
CLK 38.4KB X16
CLK 38.4KB X16 OUT
IC86 SN74HC367N
IC74 SN74HC193N
RESET
RESET OUT
ROM DISABLE IN
IC87 SN7407N
IC115 TL7705CP-B
S1 RESET
SENSE
RESIN RESET
V REF
CT
RB15 4700 X4
RB19 4700 X8
RB20 4700 X8
RB10 4700 X8
RB11 4700 X8
RB16 4700 X8
IC75 SN74ALS245AN
IC76 SN74ALS245AN
RB8 4700 X8
RB9 4700 X8
DB15 DB14 DB13 DB12 DB11 DB10 DB9 DB8
DB7 DB6 DB5 DB4 DB3 DB2 DB1 DB0
IC66 SN74HC10N
IC106 SN74HC541N
IC97 SN74HC541N
ADM15 ADM14 ADM13 ADM12 ADM11 ADM10 ADM9 ADM8
ADM7 ADM6 ADM5 ADM4 ADM3 ADM2 ADM1 ADM16
IC79 SN74HC00N
IC88 SN74ALS245AN
IC78 SN74ALS245AN
RB17 4700 X8
RB12 4700 X8
DBM15 DBM14 DBM13 DBM12 DBM11 DBM10 DBM9 DBM8
DBM7 DBM6 DBM5 DBM4 DBM3 DBM2 DBM1 DBM0
IC70 SN74HC139N
ROM ADDRESS DECODER
IC108 SN74HC138N
RAM/IO ADDRESS DECODER
IC109 SN74HC30N
IC65 SN74HC11N
R125 4700
1 2 3 4 5
A B C D E F G H

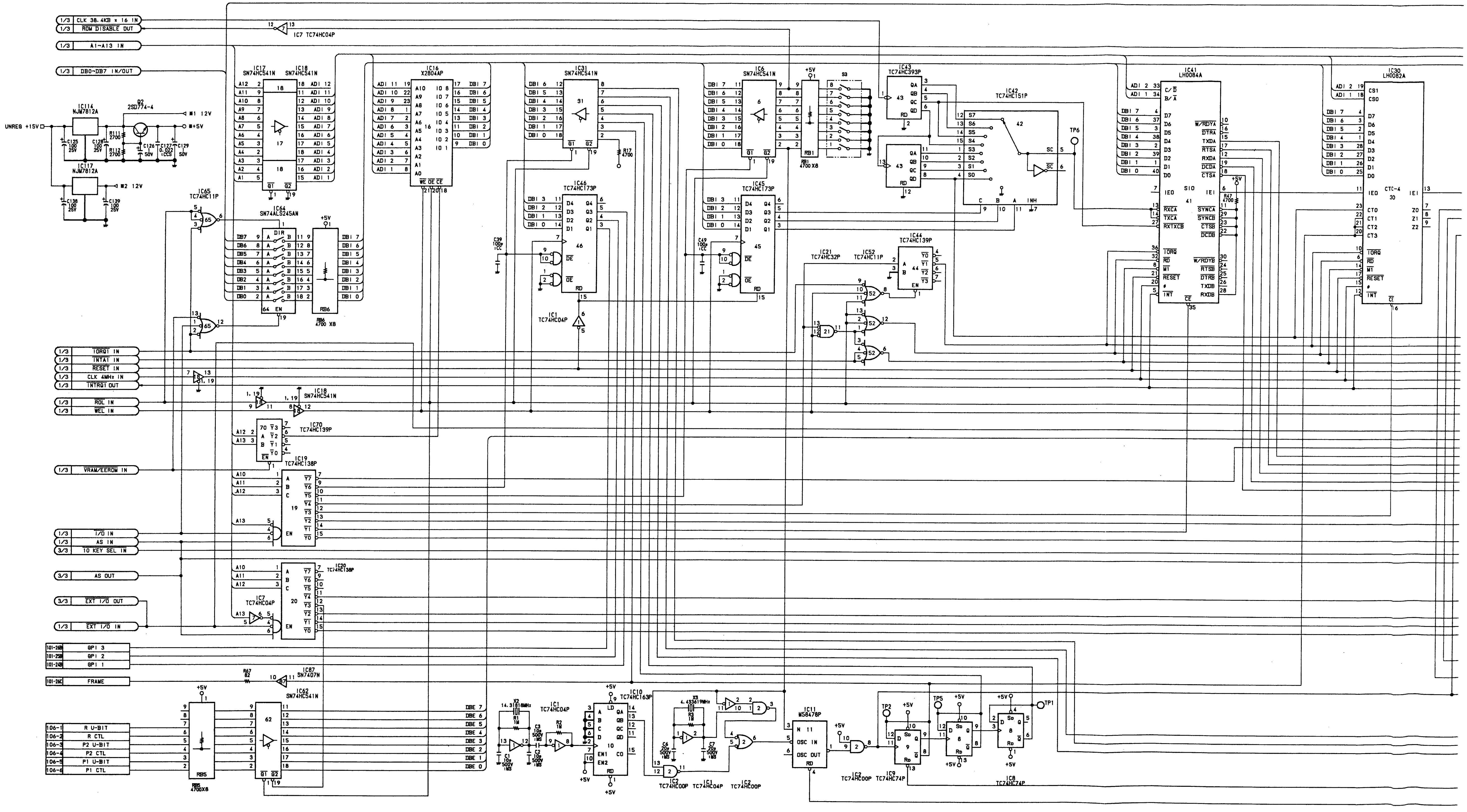

IC106 SN74HC541N
IC97 SN74HC541N
IC99 HN27C301G-20
IC100 HN27C301G-20
IC90 HN27C301G-20
IC91 HN27C301G-20
IC98 µPD43256AC-1 2L L
IC89 µPD43256AC-1 2L L
IC103 SN74HC541N
IC104 SN74HC541N
IC105 SN74HC541N
A1~A13 OUT 2/3
DB0~DB7 IN/OUT 2/3
ADDRESS BUS
DATA BUS
RB17 4700 X8
RB12 4700 X8
R94 4700
C99 0.022 ICCS
C89 0.022 ICCS
IC89, 98 256K BIT RAM
IC90, 91, 99, 100 1024 BIT ROM
00000~3FFFF
40000~7FFFF
IC70 SN74HC139N
ROM ADDRESS DECODER
IC108 SN74HC138N
88000~8BFFF
8C000~8FFFF
90000~93FFF
94000~97FFF
80000~83FFF
84000~87FFF
9C000~9FFFF
RAM/IO ADDRESS DECODER
IC109 SN74HC30N
IC107 SN74HC20N
IC68 SN74HC00N
IC65 SN74HC11N
IC80 SN74HC32N
RDL OUT 2/3
WEL OUT 2/3
I/O OUT 2/3
V RAM/EE ROM OUT 2/3
EXT I/O OUT 2/3
D1 ERB81-004
D3 ERB81-004
D2 ERB81-004
R114 100
R115 22
S2 BACKUP ON/OFF
BT1 (BATT1)
C133 220 6.3V
TP9
TP10
R117 18k
R119 200k
R118 10k
R120 10
R116 100k
C134 100p ICC
IC116 ICL7665SCPA
VOLTAGE DETECOR
IC86 SN74HC367N
UDS 101-24A
LDS 101-24C
WE 101-25C
RD 101-25A
INTACK 101-27A
AS 101-6C
IC103 SN74HC541N
AS OUT 2/3

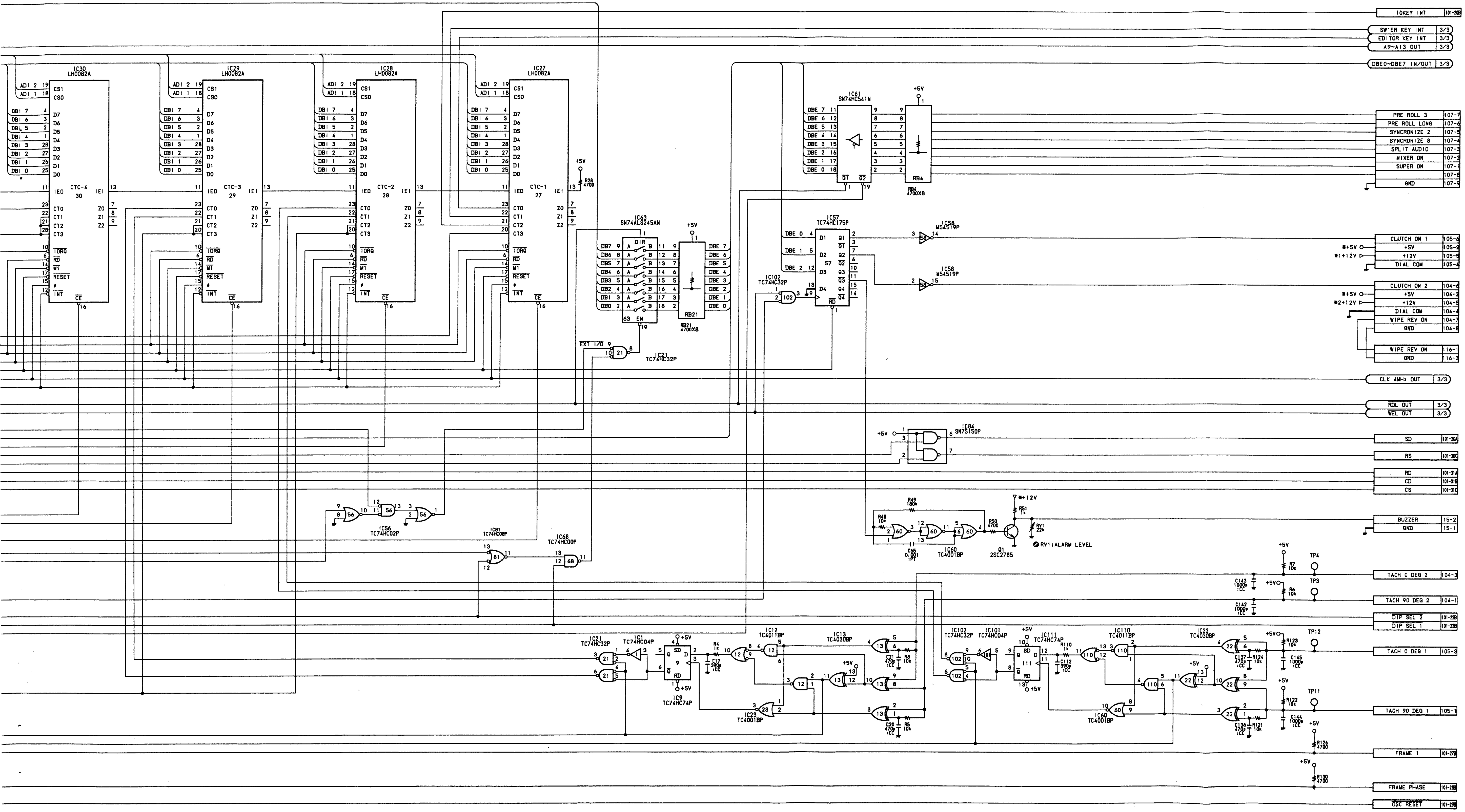
SY-113(1/3)

1-627-386-22(1)
BVE-600

SY-113(2/3); SYSTEM CONTROL

S/N UP TO 10597(UC)
S/N UP TO 10475(J)
S/N UP TO 11000(EK)


1/3 CLK 38.4KB × 16 IN
1/3 ROM DISABLE OUT
1/3 A1~A13 IN
1/3 DB0~DB7 IN/OUT
UNREG +15V
IC114 NJM7812A
Q2 2SD774-4
#1 12V
#+5V
IC117 NJM7812A
#2 12V
IC7 TC74HC04P
IC17 SN74HC541N
IC18 SN74HC541N
IC16 X2804AP
IC31 SN74HC541N
IC6 SN74HC541N
S3
RB1 4700×8
IC43 TC74HC393P
IC42 TC74HC151P
TP6
IC41 LH0084A
IC30 LH0082A
SIO
CTC-4
IC65 TC74HC11P
IC64 SN74ALS245AN
RB6 4700 X8
IC46 TC74HC173P
IC45 TC74HC173P
IC1 TC74HC04P
IC21 TC74HC32P
IC52 TC74HC11P
IC44 TC74HC139P
R47 4700
R17 4700
1/3 IORQT IN
1/3 INTAT IN
1/3 RESET IN
1/3 CLK 4MHz IN
1/3 INTRQT OUT
1/3 RDL IN
1/3 WEL IN
IC70 TC74HC139P
IC19 TC74HC138P
1/3 VRAM/EEROM IN
1/3 I/O IN
1/3 AS IN
3/3 10 KEY SEL IN
3/3 AS OUT
IC20 TC74HC138P
3/3 EXT I/O OUT
1/3 EXT I/O IN
101-26B GPI 3
101-25B GPI 2
101-24B GPI 1
101-26C FRAME
R67 82
IC87 SN7407N
IC62 SN74HC541N
106-1 R U-BIT
106-2 R CTL
106-3 P2 U-BIT
106-4 P2 CTL
106-5 P1 U-BIT
106-6 P1 CTL
RB5 4700X8
X2 14.31818MHz
IC10 TC74HC163P
X3 4.433619MHz
IC2 TC74HC00P
IC11 M58478P
OSC IN
OSC OUT
TP2
TP5
TP1
IC9 TC74HC74P
IC8 TC74HC74P
+5V
1
2
3
4
5
A
B
C
D
E
F
G
H


IC30 LH0082A
CTC-4 30
IC29 LH0082A
CTC-3 29
IC28 LH0082A
CTC-2 28
IC27 LH0082A
CTC-1 27
ADI 2
ADI 1
CS1
CS0
DBI 7
DBI 6
DBI 5
DBI 4
DBI 3
DBI 2
DBI 1
DBI 0
D7
D6
D5
D4
D3
D2
D1
D0
IEO
IEI
CT0
CT1
CT2
CT3
Z0
Z1
Z2
IORQ
RD
M1
RESET
INT
CE
+5V
R28 4700
IC63 SN74ALS245AN
DIR
EN
DB7
DB6
DB5
DB4
DB3
DB2
DB1
DB0
DBE 7
DBE 6
DBE 5
DBE 4
DBE 3
DBE 2
DBE 1
DBE 0
RB21 4700X8
EXT I/O
IC21 TC74HC32P
IC61 SN74HC541N
RB4 4700X8
IC57 TC74HC175P
IC102 TC74HC32P
IC58 M54519P
IC84 SN75150P
IC56 TC74HC02P
IC81 TC74HC08P
IC68 TC74HC00P
R49 180k
R48 10k
C65 0.001 :PT
IC60 TC4001BP
R50 4700
R51 1k
RV1 22k
Q1 2SC2785
RV1:ALARM LEVEL
+12V
TP4
TP3
R7 10k
R6 10k
C143 1000p :CC
C142 1000p :CC
IC1 TC74HC04P
IC9 TC74HC74P
R4 1k
C17 390p :CC
IC12 TC4011BP
IC13 TC4030BP
IC23 TC4001BP
C21 470p :CC
R8 10k
C20 470p :CC
R5 10k
IC101 TC74HC04P
IC111 TC74HC74P
R110 1k
C112 390p :CC
IC110 TC4011BP
IC22 TC4030BP
R123 10k
C145 1000p :CC
C137 470p :CC
R124 10k
R122 10k
C144 1000p :CC
C136 470p :CC
R121 10k
TP12
TP11
R126 4700
R130 4700
IOKEY INT 101-20B
SW'ER KEY INT 3/3
EDITOR KEY INT 3/3
A9~A13 OUT 3/3
DBE0~DBE7 IN/OUT 3/3
PRE ROLL 3 107-7
PRE ROLL LONG 107-6
SYNCRONIZE 2 107-5
SYNCRONIZE 8 107-4
SPLIT AUDIO 107-3
MIXER ON 107-2
SUPER ON 107-1
107-8
GND 107-9
CLUTCH ON 1 105-6
+5V 105-2
+12V 105-5
DIAL COM 105-4
■1+5V
■1+12V
CLUTCH ON 2 104-6
+5V 104-2
+12V 104-5
DIAL COM 104-4
WIPE REV ON 104-7
GND 104-8
■2+5V
■2+12V
WIPE REV ON 116-1
GND 116-2
CLK 4MHz OUT 3/3
RDL OUT 3/3
WEL OUT 3/3
SD 101-30A
RS 101-30C
RD 101-31A
CD 101-31B
CS 101-31C
BUZZER 15-2
GND 15-1
TACH 0 DEG 2 104-3
TACH 90 DEG 2 104-1
DIP SEL 2 101-22B
DIP SEL 1 101-23B
TACH 0 DEG 1 105-3
TACH 90 DEG 1 105-1
FRAME 1 101-27B
FRAME PHASE 101-28B
OSC RESET 101-29B

SY-113(2/3)

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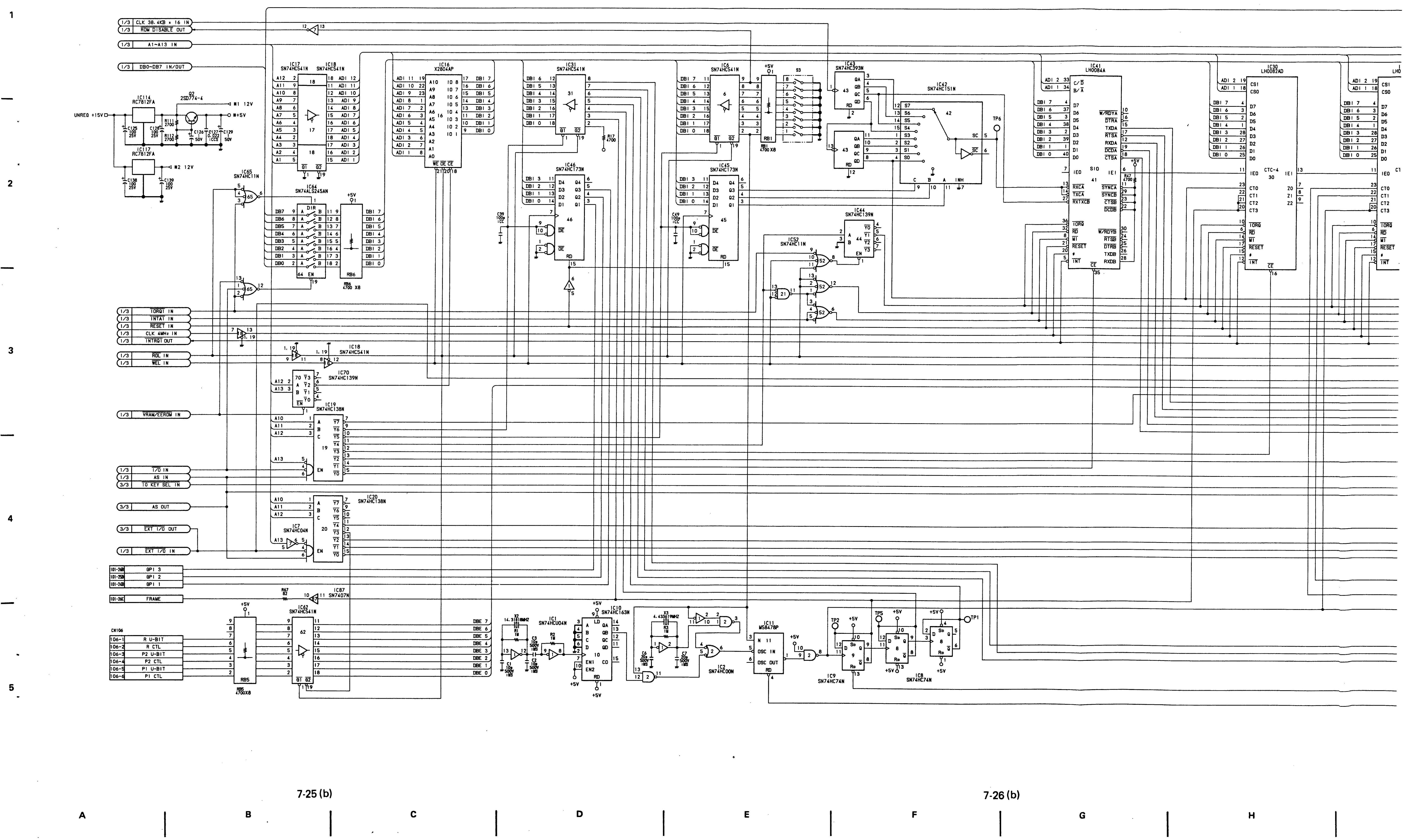
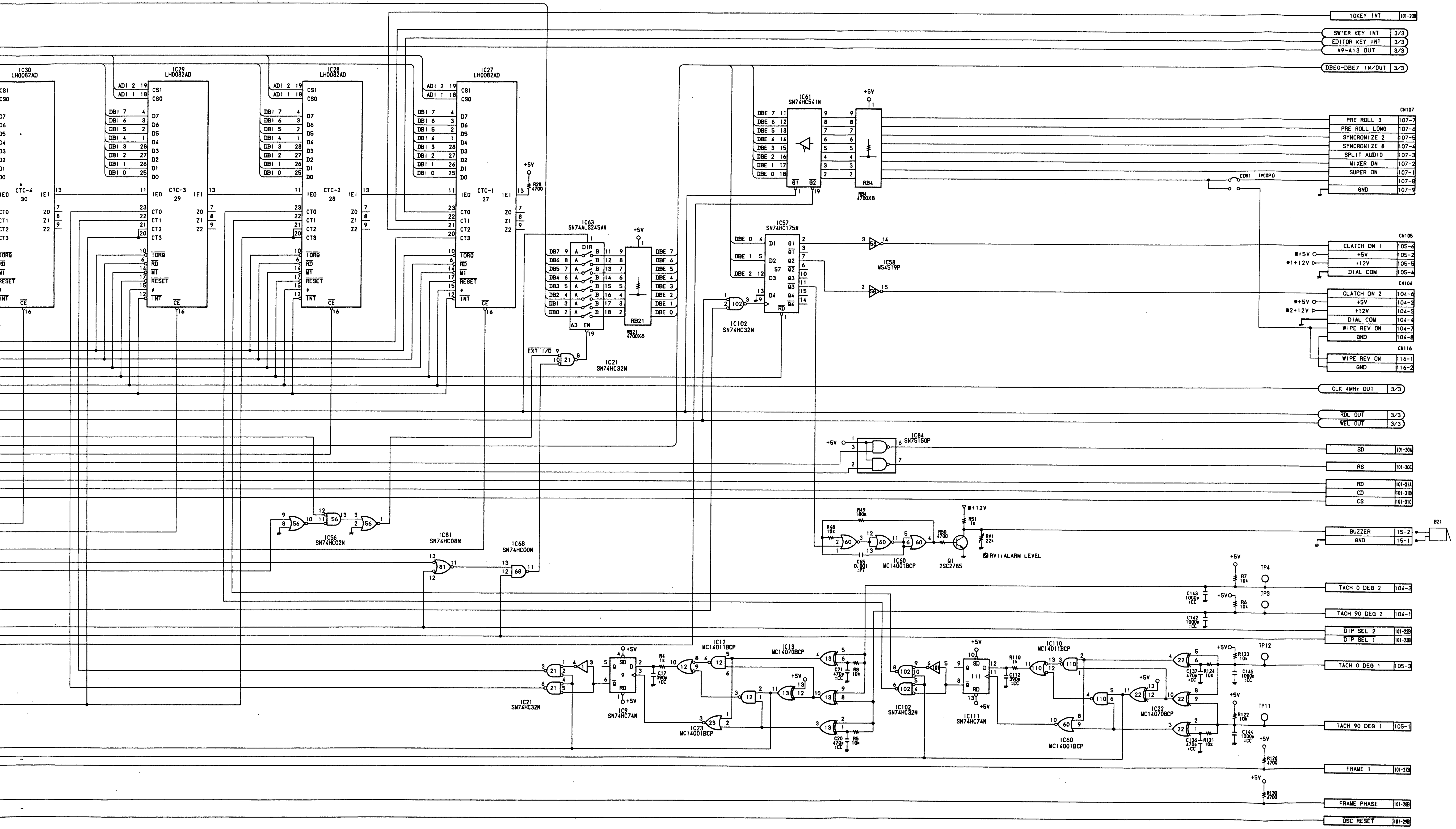
BVE-600

SY-113(2/3); SYSTEM CONTROL

S/N 20001 AND HIGHER(UC)
S/N 20001 AND HIGHER(J)
S/N 20001 AND HIGHER(EK)


1/3 CLK 38.4KB × 16 IN
1/3 ROM DISABLE OUT
1/3 A1~A13 IN
1/3 DB0~DB7 IN/OUT
UNREG +15V
IC114 RC7812FA
IC117 RC7812FA
Q2 2SD774-4
#1 12V
#+5V
#2 12V
IC65 SN74HC11N
IC17 SN74HC541N
IC18 SN74HC541N
IC16 X2804AP
IC64 SN74ALS245AN
RB6 4700 X8
IC31 SN74HC541N
IC46 SN74HC173N
IC6 SN74HC541N
IC45 SN74HC173N
RB1 4700 X8
S3
IC43 SN74HC393N
IC42 SN74HC151N
TP6
IC44 SN74HC139N
IC52 SN74HC11N
IC41 LH0084A
SIO
IC30 LH0082AD
CTC-4
1/3 IORQ1 IN
1/3 INTA1 IN
1/3 RESET IN
1/3 CLK 4MHz IN
1/3 INTRQ1 OUT
1/3 RDL IN
1/3 WEL IN
IC18 SN74HC541N
IC70 SN74HC139N
1/3 VRAM/EEROM IN
IC19 SN74HC138N
1/3 I/O IN
1/3 AS IN
3/3 10 KEY SEL IN
3/3 AS OUT
3/3 EXT I/O OUT
1/3 EXT I/O IN
IC20 SN74HC138N
IC7 SN74HC04N
101-26B BPI 3
101-25B BPI 2
101-24B BPI 1
101-26C FRAME
R67 82
IC87 SN7407N
CN106
106-1 R U-BIT
106-2 R CTL
106-3 P2 U-BIT
106-4 P2 CTL
106-5 P1 U-BIT
106-6 P1 CTL
RB5 4700X8
IC62 SN74HC541N
DBE 7
DBE 6
DBE 5
DBE 4
DBE 3
DBE 2
DBE 1
DBE 0
X2 14.31818MHZ
IC1 SN74HCU04N
IC10 SN74HC163N
X3 4.433619MHZ
IC2 SN74HC00N
IC11 M58478P
TP2
TP5
TP1
IC9 SN74HC74N
IC8 SN74HC74N
1
2
3
4
5
A
B
C
D
E
F
G
H


IC30 LH0082AD
CTC-4
IC29 LH0082AD
CTC-3
IC28 LH0082AD
CTC-2
IC27 LH0082AD
CTC-1
IC63 SN74ALS245AN
RB21 4700X8
IC61 SN74HC541N
RB4 4700X8
IC57 SN74HC175N
IC58 M54519P
IC102 SN74HC32N
IC21 SN74HC32N
EXT I/O
IC84 SN75150P
IC56 SN74HC02N
IC81 SN74HC08N
IC68 SN74HC00N
IC60 MC14001BCP
Q1 2SC2785
RV1: ALARM LEVEL
IC9 SN74HC74N
IC12 MC14011BCP
IC13 MC14070BCP
IC23 MC14001BCP
IC111 SN74HC74N
IC110 MC14011BCP
IC22 MC14070BCP
CDR1 (ｺﾈｸﾀ)
IOKEY INT 101-20B
SW'ER KEY INT 3/3
EDITOR KEY INT 3/3
A9~A13 OUT 3/3
DBE0~DBE7 IN/OUT 3/3
CN107
PRE ROLL 3 107-7
PRE ROLL LONG 107-6
SYNCRONIZE 2 107-5
SYNCRONIZE 8 107-4
SPLIT AUDIO 107-3
MIXER ON 107-2
SUPER ON 107-1
107-8
GND 107-9
CN105
CLATCH ON 1 105-6
+5V 105-2
+12V 105-5
DIAL COM 105-4
CN104
CLATCH ON 2 104-6
+5V 104-2
+12V 104-5
DIAL COM 104-4
WIPE REV ON 104-7
GND 104-8
CN116
WIPE REV ON 116-1
GND 116-2
CLK 4MHz OUT 3/3
RDL OUT 3/3
WEL OUT 3/3
SD 101-30A
RS 101-30C
RD 101-31A
CD 101-31B
CS 101-31C
BUZZER 15-2
GND 15-1
BZ1
TACH 0 DEG 2 104-3
TACH 90 DEG 2 104-1
DIP SEL 2 101-22B
DIP SEL 1 101-23B
TACH 0 DEG 1 105-3
TACH 90 DEG 1 105-1
FRAME 1 101-27B
FRAME PHASE 101-28B
OSC RESET 101-29B
TP4
TP3
TP12
TP11

SY-113(2/3)

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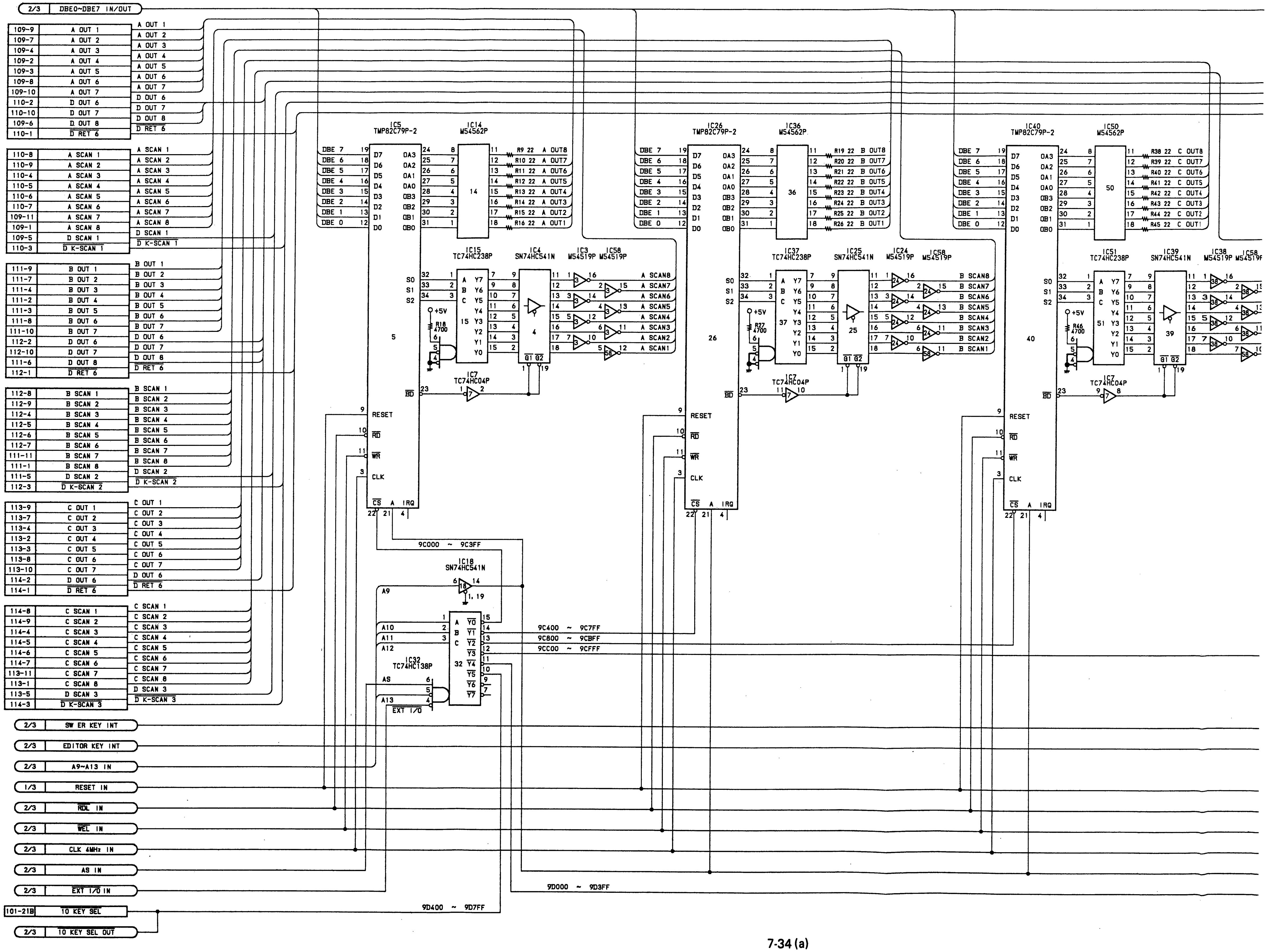
7-27 (b)

7-28 (b)

H I J K L M N O P

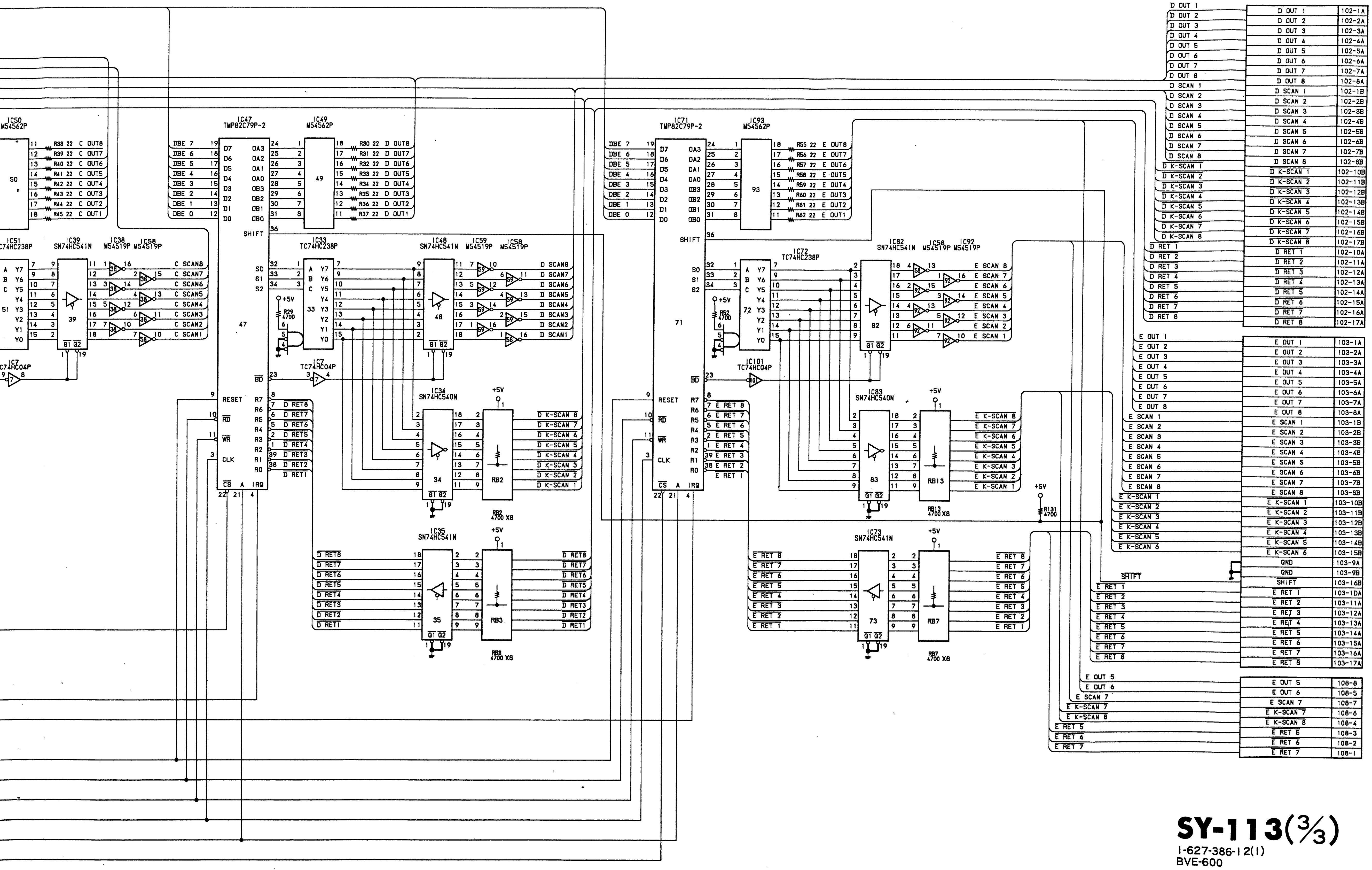
SY-113(3/3); SYSTEM CONTROL

S/N UP TO 10597(UC)
S/N UP TO 10475(J)
S/N UP TO 11000(EK)


2/3 DBE0~DBE7 IN/OUT
109-9 A OUT 1
109-7 A OUT 2
109-4 A OUT 3
109-2 A OUT 4
109-3 A OUT 5
109-8 A OUT 6
109-10 A OUT 7
110-2 D OUT 6
110-10 D OUT 7
109-6 D OUT 8
110-1 D RET 6
110-8 A SCAN 1
110-9 A SCAN 2
110-4 A SCAN 3
110-5 A SCAN 4
110-6 A SCAN 5
110-7 A SCAN 6
109-11 A SCAN 7
109-1 A SCAN 8
109-5 D SCAN 1
110-3 D K-SCAN 1
111-9 B OUT 1
111-7 B OUT 2
111-4 B OUT 3
111-2 B OUT 4
111-3 B OUT 5
111-8 B OUT 6
111-10 B OUT 7
112-2 D OUT 6
112-10 D OUT 7
111-6 D OUT 8
112-1 D RET 6
112-8 B SCAN 1
112-9 B SCAN 2
112-4 B SCAN 3
112-5 B SCAN 4
112-6 B SCAN 5
112-7 B SCAN 6
111-11 B SCAN 7
111-1 B SCAN 8
111-5 D SCAN 2
112-3 D K-SCAN 2
113-9 C OUT 1
113-7 C OUT 2
113-4 C OUT 3
113-2 C OUT 4
113-3 C OUT 5
113-8 C OUT 6
113-10 C OUT 7
114-2 D OUT 6
114-1 D RET 6
114-8 C SCAN 1
114-9 C SCAN 2
114-4 C SCAN 3
114-5 C SCAN 4
114-6 C SCAN 5
114-7 C SCAN 6
113-11 C SCAN 7
113-1 C SCAN 8
113-5 D SCAN 3
114-3 D K-SCAN 3
IC5 TMP82C79P-2
IC14 M54562P
IC15 TC74HC238P
IC4 SN74HC541N
IC3 M54519P
IC58 M54519P
IC7 TC74HC04P
R18 4700
+5V
A OUT8
A OUT7
A OUT6
A OUT5
A OUT4
A OUT3
A OUT2
A OUT1
A SCAN8
A SCAN7
A SCAN6
A SCAN5
A SCAN4
A SCAN3
A SCAN2
A SCAN1
IC26 TMP82C79P-2
IC36 M54562P
IC37 TC74HC238P
IC25 SN74HC541N
IC24 M54519P
IC58 M54519P
IC7 TC74HC04P
R27 4700
B OUT8
B OUT7
B OUT6
B OUT5
B OUT4
B OUT3
B OUT2
B OUT1
B SCAN8
B SCAN7
B SCAN6
B SCAN5
B SCAN4
B SCAN3
B SCAN2
B SCAN1
IC40 TMP82C79P-2
IC50 M54562P
IC51 TC74HC238P
IC39 SN74HC541N
IC38 M54519P
IC58 M54519P
IC7 TC74HC04P
R46 4700
C OUT8
C OUT7
C OUT6
C OUT5
C OUT4
C OUT3
C OUT2
C OUT1
DBE 7
DBE 6
DBE 5
DBE 4
DBE 3
DBE 2
DBE 1
DBE 0
D7
D6
D5
D4
D3
D2
D1
D0
DA3
DA2
DA1
DA0
DB3
DB2
DB1
DB0
S0
S1
S2
BD
RESET
RD
WR
CLK
CS
A
IRQ
9C000 ~ 9C3FF
IC18 SN74HC541N
A9
A10
A11
A12
AS
A13
EXT I/O
IC32 TC74HC138P
9C400 ~ 9C7FF
9C800 ~ 9CBFF
9CC00 ~ 9CFFF
2/3 SW ER KEY INT
2/3 EDITOR KEY INT
2/3 A9~A13 IN
1/3 RESET IN
2/3 RDL IN
2/3 WEL IN
2/3 CLK 4MHz IN
2/3 AS IN
2/3 EXT I/O IN
101-21B 10 KEY SEL
2/3 10 KEY SEL OUT
9D000 ~ 9D3FF
9D400 ~ 9D7FF

1
2
3
4
5

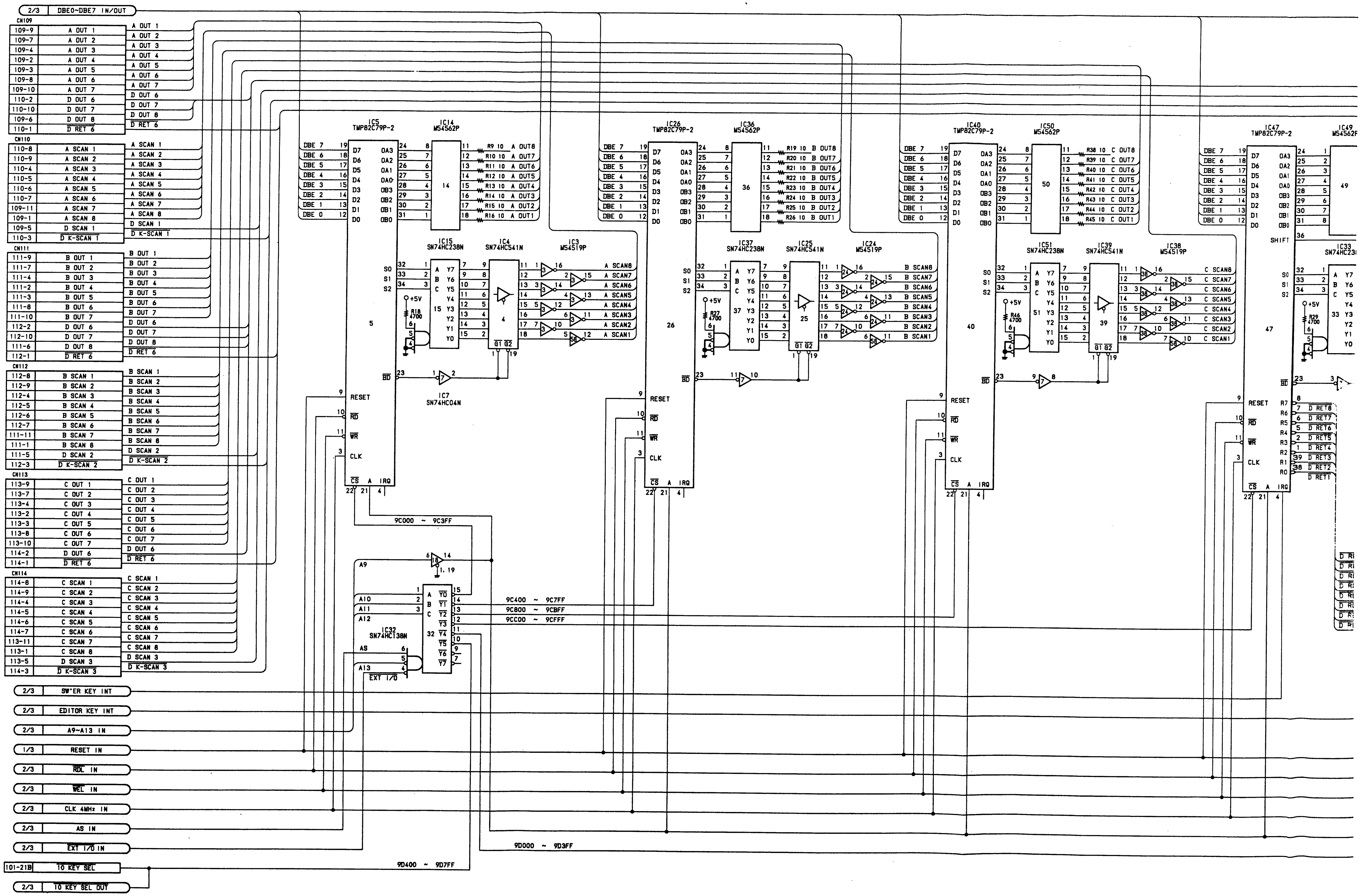
A B C D E F G H

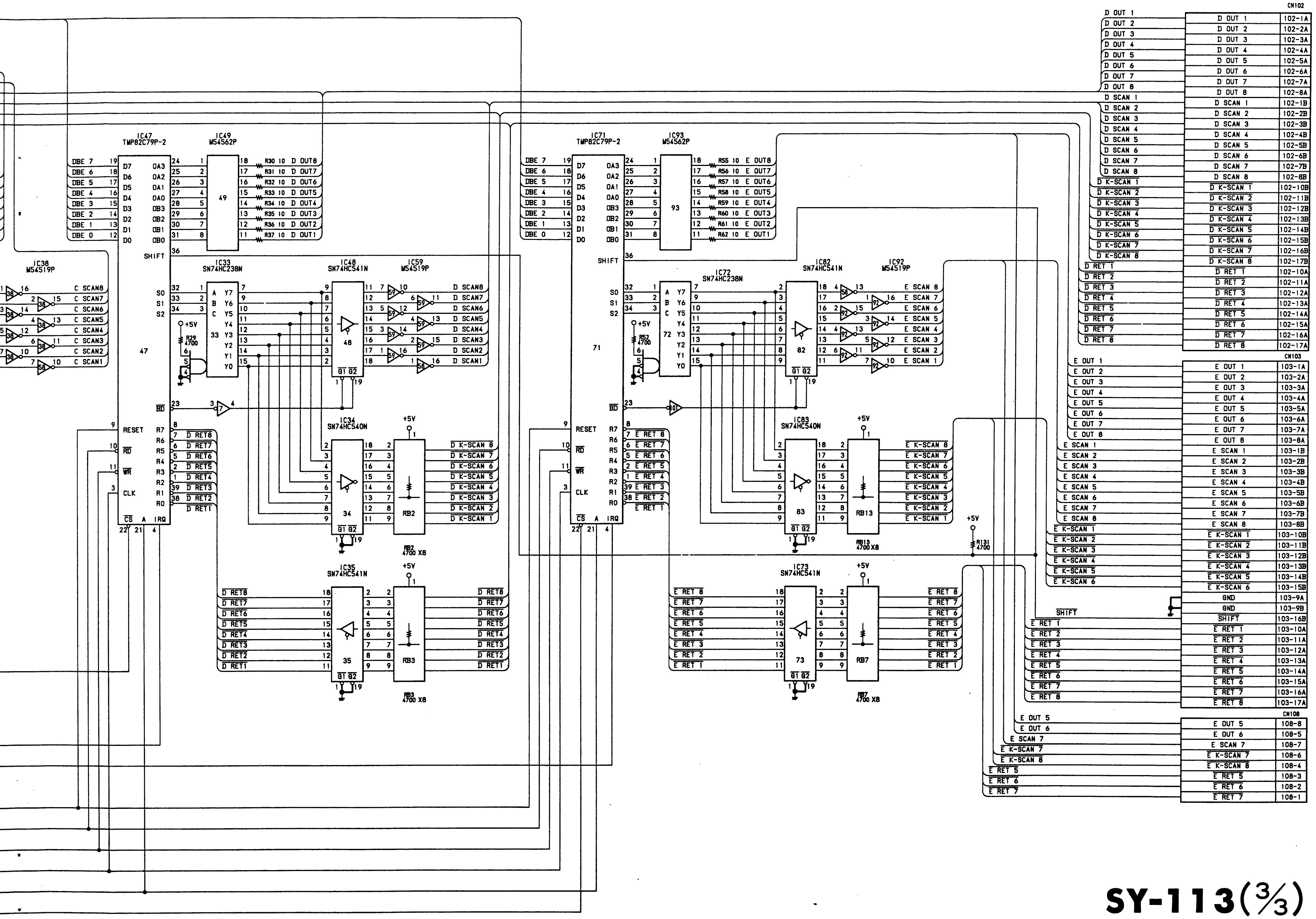

IC50
M54562P
IC51
TC74HC238P
IC39
SN74HC541N
IC38
M54519P
IC58
M54519P
IC7
TC74HC04P
IC47
TMP82C79P-2
IC49
M54562P
IC33
TC74HC238P
IC48
SN74HC541N
IC59
M54519P
IC34
SN74HC540N
IC35
SN74HC541N
RB2
4700 X8
RB3
4700 X8
IC71
TMP82C79P-2
IC93
M54562P
IC72
TC74HC238P
IC82
SN74HC541N
IC92
M54519P
IC101
TC74HC04P
IC83
SN74HC540N
IC73
SN74HC541N
RB13
4700 X8
RB7
4700 X8
R29
4700
R52
4700
R131
4700
+5V
RESET
RD
WR
CLK
CS
A
IRQ
SHIFT
BD
D OUT1 … D OUT8
C OUT1 … C OUT8
C SCAN1 … C SCAN8
D SCAN1 … D SCAN8
D K-SCAN 1 … D K-SCAN 8
D RET1 … D RET8
E OUT1 … E OUT8
E SCAN 1 … E SCAN 8
E K-SCAN 1 … E K-SCAN 8
E RET 1 … E RET 8
DBE 0 … DBE 7
D OUT 1 102-1A
D OUT 2 102-2A
D OUT 3 102-3A
D OUT 4 102-4A
D OUT 5 102-5A
D OUT 6 102-6A
D OUT 7 102-7A
D OUT 8 102-8A
D SCAN 1 102-1B
D SCAN 2 102-2B
D SCAN 3 102-3B
D SCAN 4 102-4B
D SCAN 5 102-5B
D SCAN 6 102-6B
D SCAN 7 102-7B
D SCAN 8 102-8B
D K-SCAN 1 102-10B
D K-SCAN 2 102-11B
D K-SCAN 3 102-12B
D K-SCAN 4 102-13B
D K-SCAN 5 102-14B
D K-SCAN 6 102-15B
D K-SCAN 7 102-16B
D K-SCAN 8 102-17B
D RET 1 102-10A
D RET 2 102-11A
D RET 3 102-12A
D RET 4 102-13A
D RET 5 102-14A
D RET 6 102-15A
D RET 7 102-16A
D RET 8 102-17A
E OUT 1 103-1A
E OUT 2 103-2A
E OUT 3 103-3A
E OUT 4 103-4A
E OUT 5 103-5A
E OUT 6 103-6A
E OUT 7 103-7A
E OUT 8 103-8A
E SCAN 1 103-1B
E SCAN 2 103-2B
E SCAN 3 103-3B
E SCAN 4 103-4B
E SCAN 5 103-5B
E SCAN 6 103-6B
E SCAN 7 103-7B
E SCAN 8 103-8B
E K-SCAN 1 103-10B
E K-SCAN 2 103-11B
E K-SCAN 3 103-12B
E K-SCAN 4 103-13B
E K-SCAN 5 103-14B
E K-SCAN 6 103-15B
GND 103-9A
GND 103-9B
SHIFT 103-16B
E RET 1 103-10A
E RET 2 103-11A
E RET 3 103-12A
E RET 4 103-13A
E RET 5 103-14A
E RET 6 103-15A
E RET 7 103-16A
E RET 8 103-17A
E OUT 5 108-8
E OUT 6 108-5
E SCAN 7 108-7
E K-SCAN 7 108-6
E K-SCAN 8 108-4
E RET 5 108-3
E RET 6 108-2
E RET 7 108-1

SY-113(3/3)
1-627-386-12(1)
BVE-600

SY-113(3/3); SYSTEM CONTROL

S/N 20001 AND HIGHER(UC)
S/N 20001 AND HIGHER(J)
S/N 20001 AND HIGHER(EK)

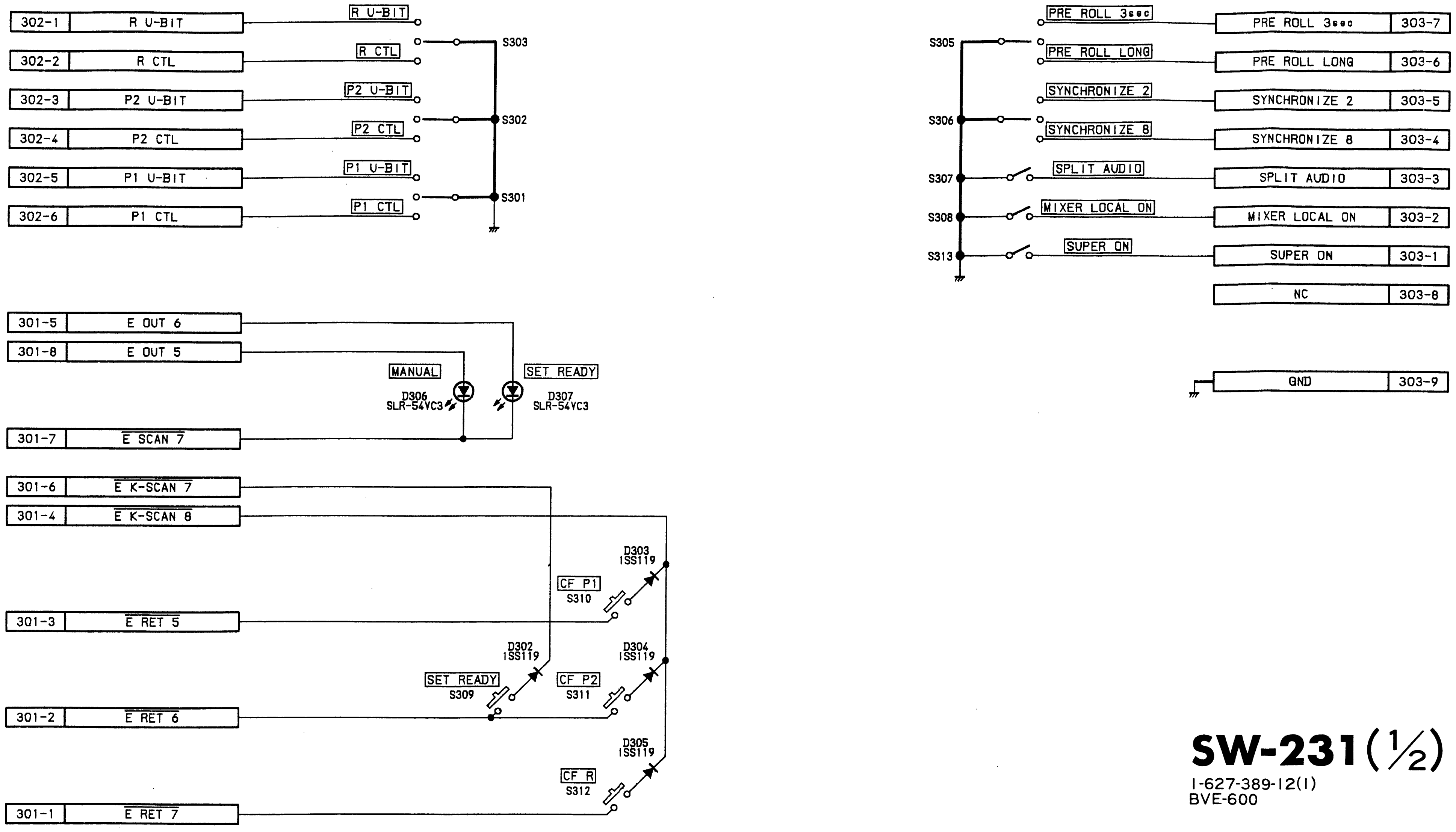

2/3 DBE0-DBE7 IN/OUT
CN109
CN110
CN111
CN112
CN113
CN114
A OUT 1 – A OUT 7
D OUT 6
D OUT 7
D OUT 8
D RET 6
A SCAN 1 – A SCAN 8
D SCAN 1
D K-SCAN 1
B OUT 1 – B OUT 7
B SCAN 1 – B SCAN 8
D SCAN 2
D K-SCAN 2
C OUT 1 – C OUT 7
C SCAN 1 – C SCAN 8
D SCAN 3
D K-SCAN 3
IC5 TMP82C79P-2
IC14 M54562P
IC15 SN74HC238N
IC4 SN74HC541N
IC3 M54519P
IC7 SN74HC04N
IC26 TMP82C79P-2
IC36 M54562P
IC37 SN74HC238N
IC25 SN74HC541N
IC24 M54519P
IC40 TMP82C79P-2
IC50 M54562P
IC51 SN74HC238N
IC39 SN74HC541N
IC38 M54519P
IC47 TMP82C79P-2
IC49 M54562P
IC33 SN74HC238
IC32 SN74HC138N
RESET
RD
WR
CLK
CS
IRQ
SHIFT
+5V
9C000 ~ 9C3FF
9C400 ~ 9C7FF
9C800 ~ 9CBFF
9CC00 ~ 9CFFF
9D000 ~ 9D3FF
9D400 ~ 9D7FF
A9
A10
A11
A12
A13
AS
EXT I/O
2/3 SW'ER KEY INT
2/3 EDITOR KEY INT
2/3 A9~A13 IN
1/3 RESET IN
2/3 RDL IN
2/3 WEL IN
2/3 CLK 4MHz IN
2/3 AS IN
2/3 EXT I/O IN
101-21B TO KEY SEL
2/3 TO KEY SEL OUT
1
2
3
4
5
A
B
C
D
E
F
G
H


IC47 TMP82C79P-2
IC49 M54562P
IC38 M54519P
IC33 SN74HC238N
IC48 SN74HC541N
IC59 M54519P
IC34 SN74HC540N
IC35 SN74HC541N
IC71 TMP82C79P-2
IC93 M54562P
IC72 SN74HC238N
IC82 SN74HC541N
IC92 M54519P
IC83 SN74HC540N
IC73 SN74HC541N
RB2 4700 X8
RB3 4700 X8
RB13 4700 X8
RB7 4700 X8
R29 4700
R52 4700
R131 4700
+5V
RESET
RD
WR
CLK
CS
IRQ
SHIFT
CN102
CN103
CN108
D OUT 1
D OUT 2
D OUT 3
D OUT 4
D OUT 5
D OUT 6
D OUT 7
D OUT 8
D SCAN 1
D SCAN 2
D SCAN 3
D SCAN 4
D SCAN 5
D SCAN 6
D SCAN 7
D SCAN 8
D K-SCAN 1
D K-SCAN 2
D K-SCAN 3
D K-SCAN 4
D K-SCAN 5
D K-SCAN 6
D K-SCAN 7
D K-SCAN 8
D RET 1
D RET 2
D RET 3
D RET 4
D RET 5
D RET 6
D RET 7
D RET 8
E OUT 1
E OUT 2
E OUT 3
E OUT 4
E OUT 5
E OUT 6
E OUT 7
E OUT 8
E SCAN 1
E SCAN 2
E SCAN 3
E SCAN 4
E SCAN 5
E SCAN 6
E SCAN 7
E SCAN 8
E K-SCAN 1
E K-SCAN 2
E K-SCAN 3
E K-SCAN 4
E K-SCAN 5
E K-SCAN 6
E K-SCAN 7
E K-SCAN 8
E RET 1
E RET 2
E RET 3
E RET 4
E RET 5
E RET 6
E RET 7
E RET 8
GND
C SCAN1
C SCAN2
C SCAN3
C SCAN4
C SCAN5
C SCAN6
C SCAN7
C SCAN8
DBE 0
DBE 1
DBE 2
DBE 3
DBE 4
DBE 5
DBE 6
DBE 7

SY-113(3/3)

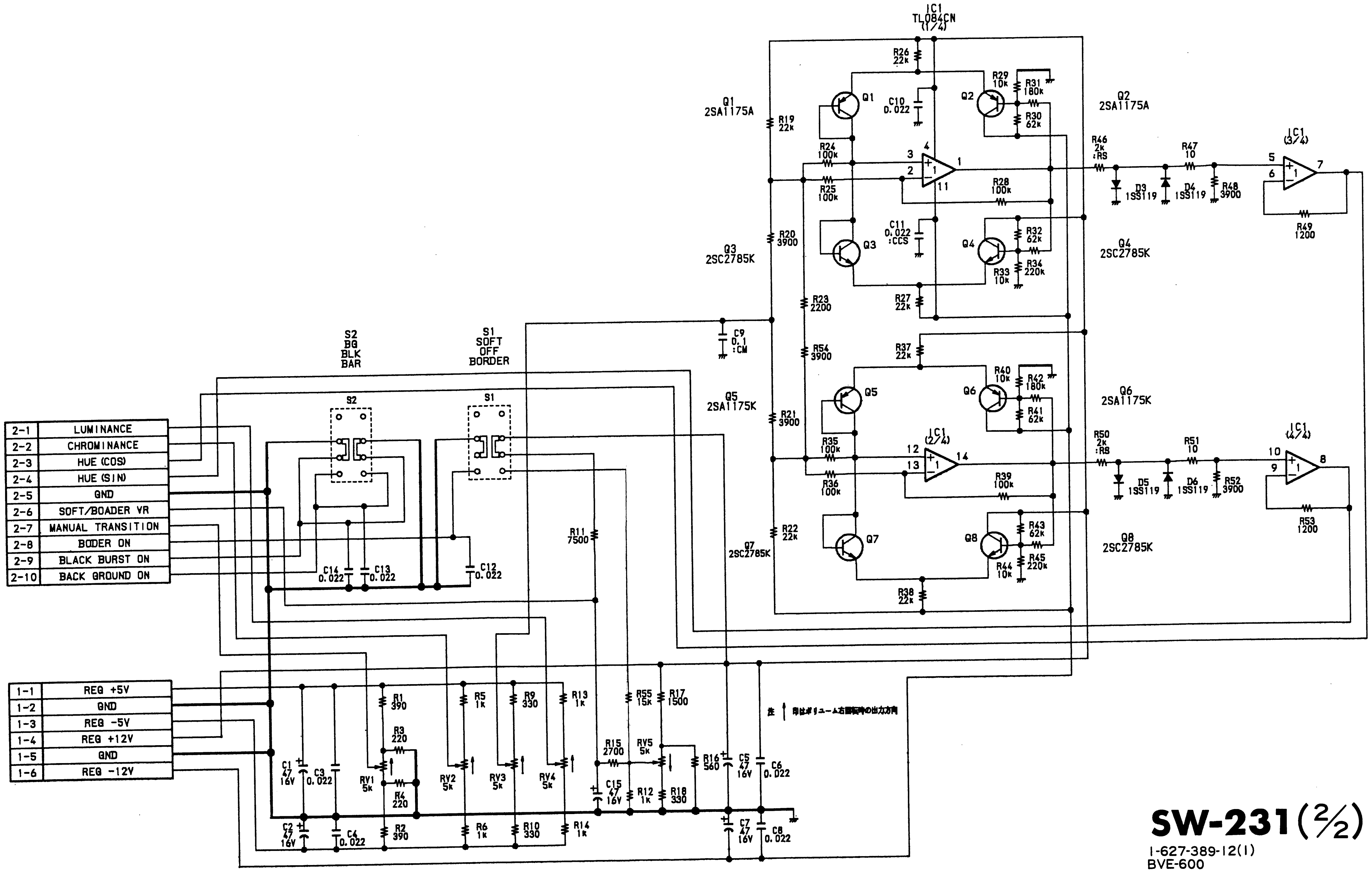
1-627-386-22(1)
BVE-600

SW-231(1/2); VR/SWITCH SELECT


302-1 R U-BIT
302-2 R CTL
302-3 P2 U-BIT
302-4 P2 CTL
302-5 P1 U-BIT
302-6 P1 CTL
R U-BIT
R CTL
P2 U-BIT
P2 CTL
P1 U-BIT
P1 CTL
S303
S302
S301
301-5 E OUT 6
301-8 E OUT 5
MANUAL
SET READY
D306 SLR-54VC3
D307 SLR-54VC3
301-7 E SCAN 7
301-6 E K-SCAN 7
301-4 E K-SCAN 8
D303 1SS119
CF P1 S310
301-3 E RET 5
D302 1SS119
D304 1SS119
SET READY S309
CF P2 S311
301-2 E RET 6
D305 1SS119
CF R S312
301-1 E RET 7
S305
PRE ROLL 3sec
PRE ROLL LONG
SYNCHRONIZE 2
S306
SYNCHRONIZE 8
S307
SPLIT AUDIO
S308
MIXER LOCAL ON
S313
SUPER ON
PRE ROLL 3sec 303-7
PRE ROLL LONG 303-6
SYNCHRONIZE 2 303-5
SYNCHRONIZE 8 303-4
SPLIT AUDIO 303-3
MIXER LOCAL ON 303-2
SUPER ON 303-1
NC 303-8
GND 303-9

SW-231(1/2)
1-627-389-12(1)
BVE-600

SW-231(2/2); VR/SWITCH SELECT

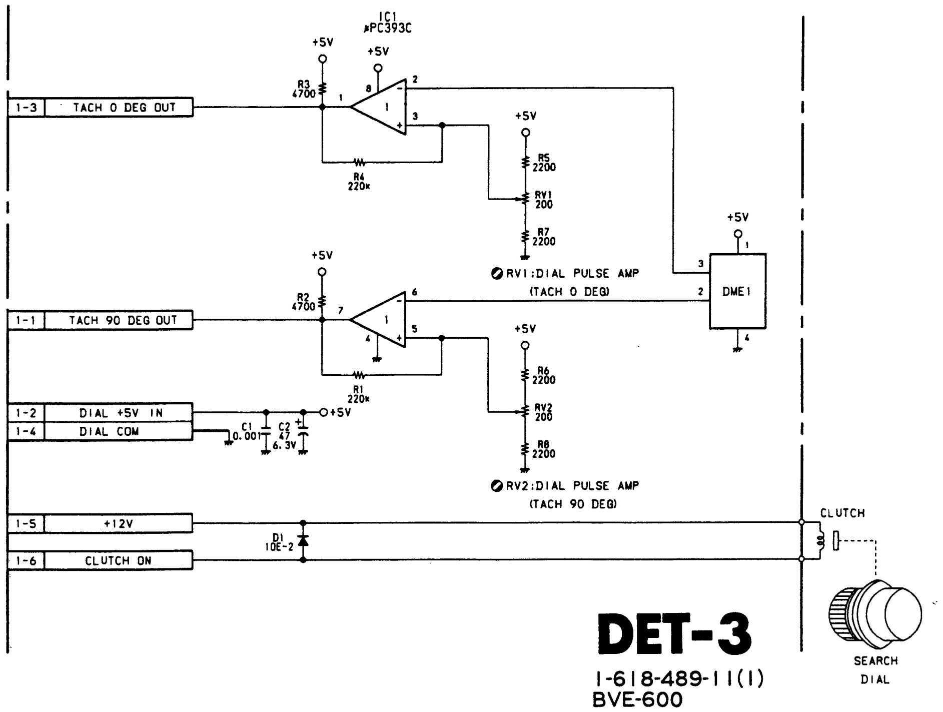

2-1 LUMINANCE
2-2 CHROMINANCE
2-3 HUE (COS)
2-4 HUE (SIN)
2-5 GND
2-6 SOFT/BOADER VR
2-7 MANUAL TRANSITION
2-8 BODER ON
2-9 BLACK BURST ON
2-10 BACK GROUND ON
1-1 REG +5V
1-2 GND
1-3 REG -5V
1-4 REG +12V
1-5 GND
1-6 REG -12V
S2 BG BLK BAR
S1 SOFT OFF BORDER
IC1 TL084CN (1/4)
IC1 (2/4)
IC1 (3/4)
IC1 (4/4)
Q1 2SA1175A
Q2 2SA1175A
Q3 2SC2785K
Q4 2SC2785K
Q5 2SA1175K
Q6 2SA1175K
Q7 2SC2785K
Q8 2SC2785K
D3 1SS119
D4 1SS119
D5 1SS119
D6 1SS119
R26 22k
R19 22k
C10 0.022
R29 10k
R31 180k
R30 62k
R24 100k
R25 100k
R28 100k
R46 2k :RS
R47 10
R48 3900
R49 1200
C11 0.022 :CCS
R20 3900
R32 62k
R36 220k
R33 10k
R27 22k
R23 2200
C9 0.1 :CM
R54 3900
R37 22k
R40 10k
R42 180k
R41 62k
R21 3900
R35 100k
R36 100k
R39 100k
R50 2k :RS
R51 10
R52 3900
R53 1200
R22 22k
R43 62k
R45 220k
R44 10k
R38 22k
R11 7500
C14 0.022
C13 0.022
C12 0.022
R1 390
R3 220
R4 220
R2 390
RV1 5k
RV2 5k
RV3 5k
RV4 5k
RV5 5k
R5 1k
R6 1k
R9 330
R10 330
R13 1k
R14 1k
R55 15k
R17 1500
R15 2700
R12 1k
R18 330
R16 560
C15 47 16V
C1 47 16V
C2 47 16V
C3 0.022
C4 0.022
C5 47 16V
C6 0.022
C7 47 16V
C8 0.022

注 ↑ 印はボリューム右回転時の出力方向

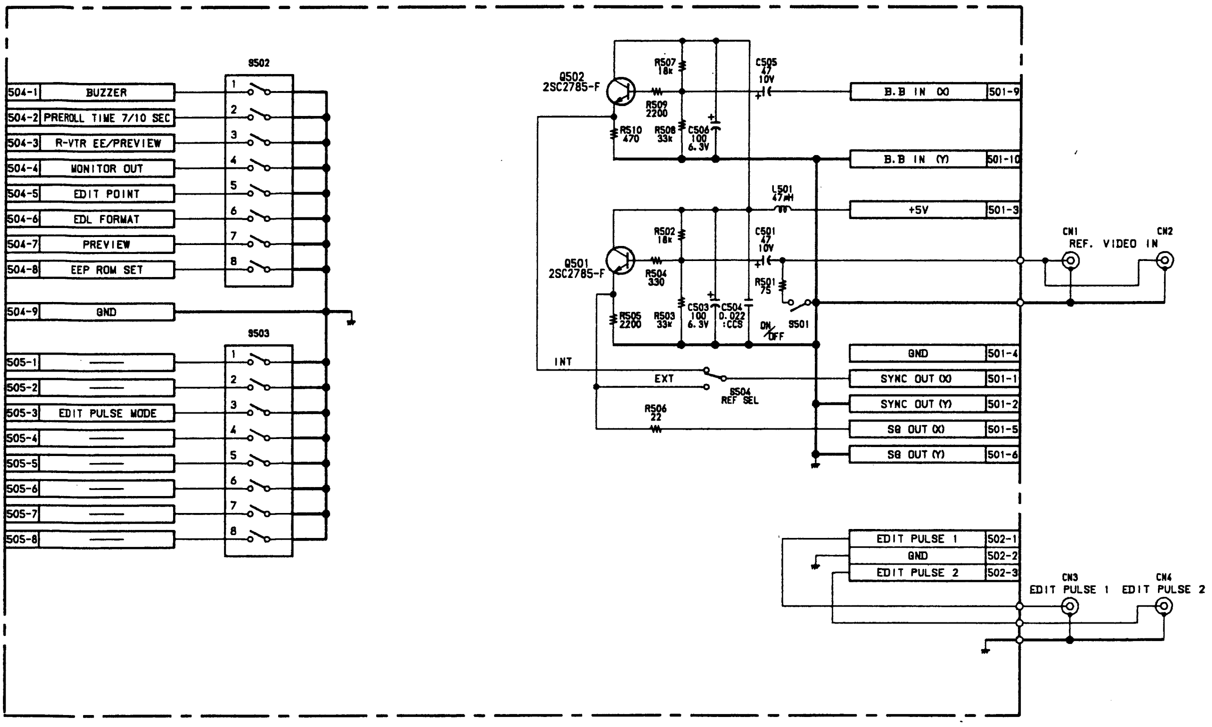
⊘RV1;MANUAL TR ⊘RV3;HUE (S/C) ⊘RV5;SOFT/BODER
⊘RV2;CHROMINANCE ⊘RV4;LUMINANCE

SW-231(2/2)
1-627-389-12(1)
BVE-600

DET-3; SEARCH DIAL DETECTOR

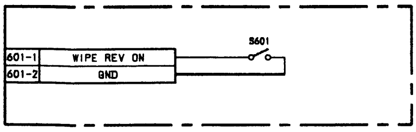

IC1
μPC393C
+5V
R3
4700
R4
220k
R5
2200
RV1
200
R7
2200
RV1:DIAL PULSE AMP
(TACH 0 DEG)
1-3
TACH 0 DEG OUT
1-1
TACH 90 DEG OUT
R2
4700
R1
220k
DME1
R6
2200
RV2
200
R8
2200
RV2:DIAL PULSE AMP
(TACH 90 DEG)
1-2
DIAL +5V IN
1-4
DIAL COM
C1
0.001
C2
47
6.3V
1-5
+12V
1-6
CLUTCH ON
D1
10E-2
CLUTCH
SEARCH
DIAL
DET-3
1-618-489-11(1)
BVE-600

CN-249; CONNECTOR BOARD
SW-232, SWITCH


S502
504-1 BUZZER
504-2 PREROLL TIME 7/10 SEC
504-3 R-VTR EE/PREVIEW
504-4 MONITOR OUT
504-5 EDIT POINT
504-6 EDL FORMAT
504-7 PREVIEW
504-8 EEP ROM SET
504-9 GND
S503
505-1
505-2
505-3 EDIT PULSE MODE
505-4
505-5
505-6
505-7
505-8
Q502 2SC2785-F
R507 18k
R509 2200
R510 470
R508 33k
C506 100 6.3V
C505 47 10V
Q501 2SC2785-F
R502 18k
R504 330
R505 2200
R503 33k
C503 100 6.3V
C504 0.022 :CCS
L501 47µH
C501 47 10V
R501 75
ON/OFF S501
INT
EXT
S504 REF SEL
R506 22
B.B IN (X) 501-9
B.B IN (Y) 501-10
+5V 501-3
CN1 CN2 REF. VIDEO IN
GND 501-4
SYNC OUT (X) 501-1
SYNC OUT (Y) 501-2
SB OUT (X) 501-5
SB OUT (Y) 501-6
EDIT PULSE 1 502-1
GND 502-2
EDIT PULSE 2 502-3
CN3 EDIT PULSE 1
CN4 EDIT PULSE 2

CN-249

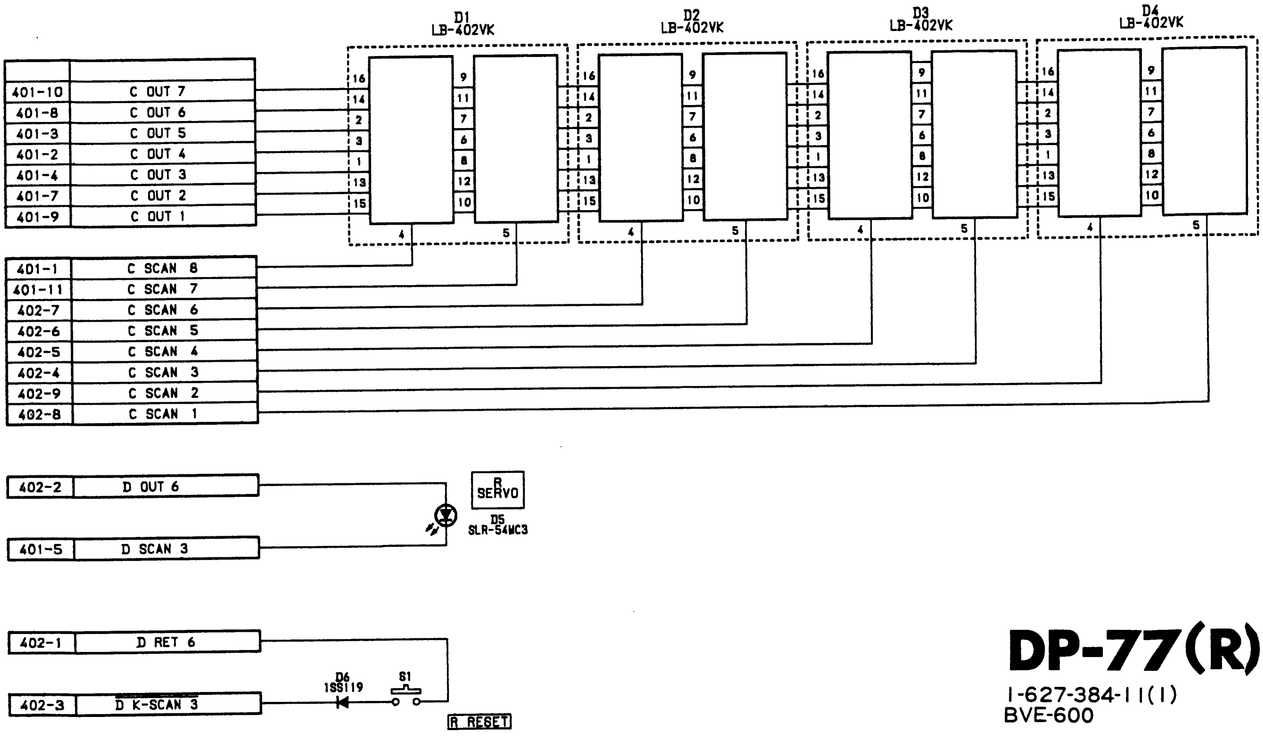
1-627-385-13(1)
BVE-600


S601
601-1 WIPE REV ON
601-2 GND

SW-232

1-627-383-12(1)
BVE-600

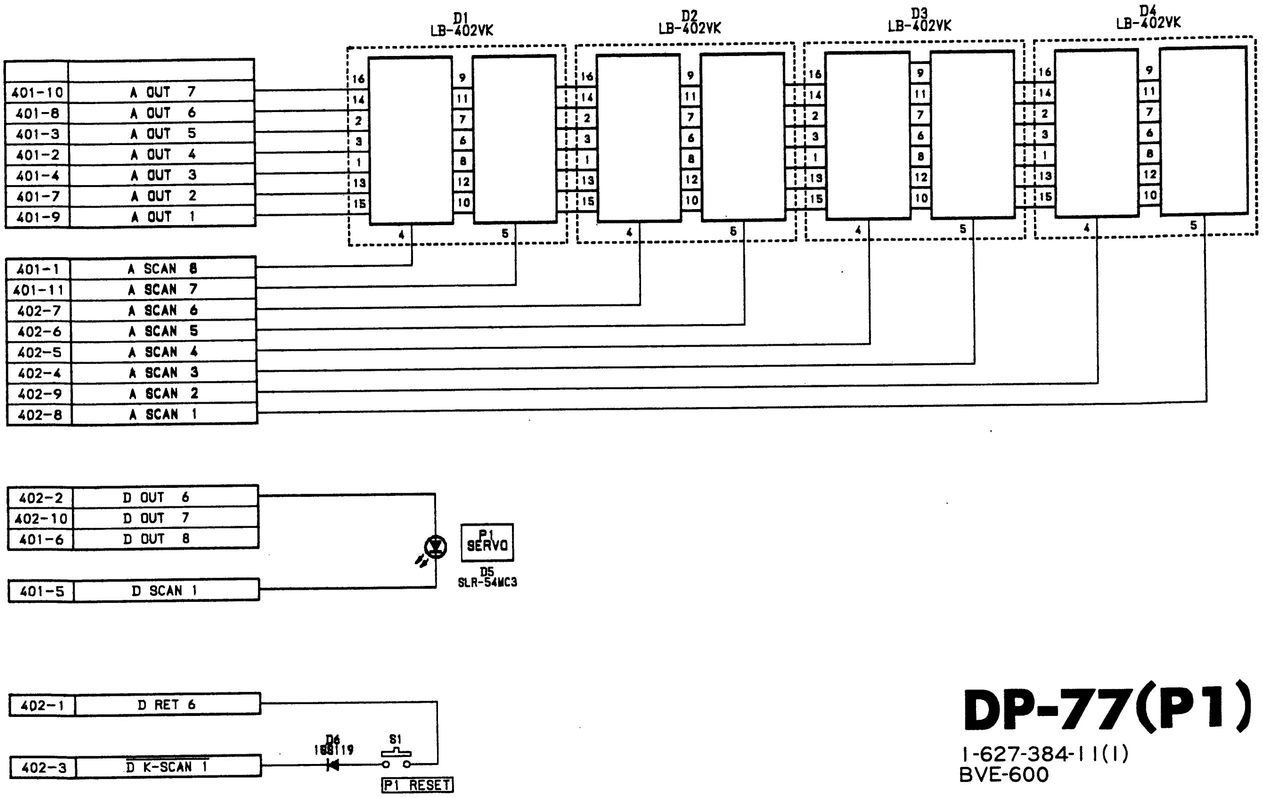
DP-77(R); TIME COUNTER DISPLAY


D1
LB-402VK
D2
LB-402VK
D3
LB-402VK
D4
LB-402VK
401-10 C OUT 7
401-8 C OUT 6
401-3 C OUT 5
401-2 C OUT 4
401-4 C OUT 3
401-7 C OUT 2
401-9 C OUT 1
16
14
2
3
1
13
15
9
11
7
6
8
12
10
4
5
401-1 C SCAN 8
401-11 C SCAN 7
402-7 C SCAN 6
402-6 C SCAN 5
402-5 C SCAN 4
402-4 C SCAN 3
402-9 C SCAN 2
402-8 C SCAN 1
402-2 D OUT 6
401-5 D SCAN 3
R SERVO
D5
SLR-54MC3
402-1 D RET 6
402-3 D K-SCAN 3
D6
1SS119
S1
R RESET

DP-77(R)

1-627-384-11(1)
BVE-600

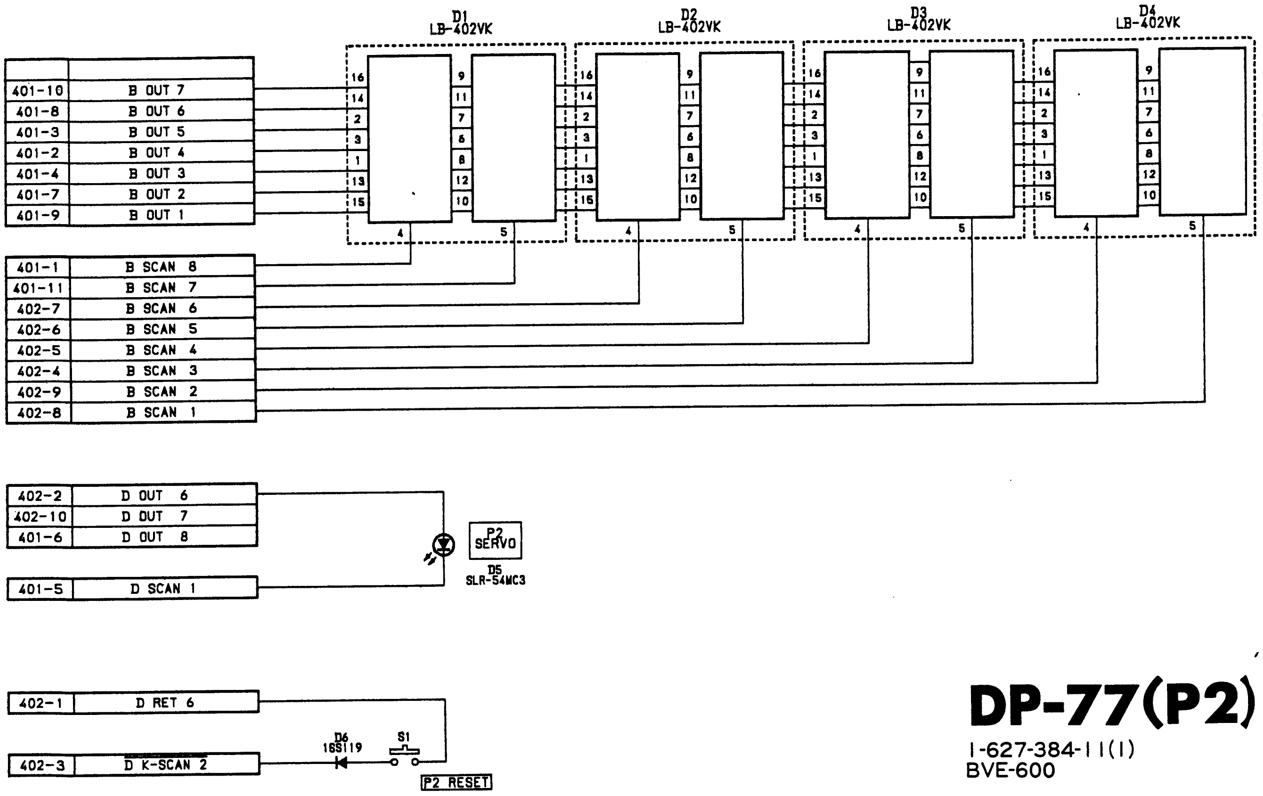
DP-77(P1); TIME COUNTER DISPLAY


D1
LB-402VK
D2
LB-402VK
D3
LB-402VK
D4
LB-402VK
16
14
2
3
1
13
15
9
11
7
6
8
12
10
4
5
401-10
A OUT 7
401-8
A OUT 6
401-3
A OUT 5
401-2
A OUT 4
401-4
A OUT 3
401-7
A OUT 2
401-9
A OUT 1
401-1
A SCAN 8
401-11
A SCAN 7
402-7
A SCAN 6
402-6
A SCAN 5
402-5
A SCAN 4
402-4
A SCAN 3
402-9
A SCAN 2
402-8
A SCAN 1
402-2
D OUT 6
402-10
D OUT 7
401-6
D OUT 8
401-5
D SCAN 1
P1
SERVO
D5
SLR-54MC3
402-1
D RET 6
402-3
D K-SCAN 1
D6
1SS119
S1
P1 RESET

DP-77(P1)

1-627-384-11(1)
BVE-600

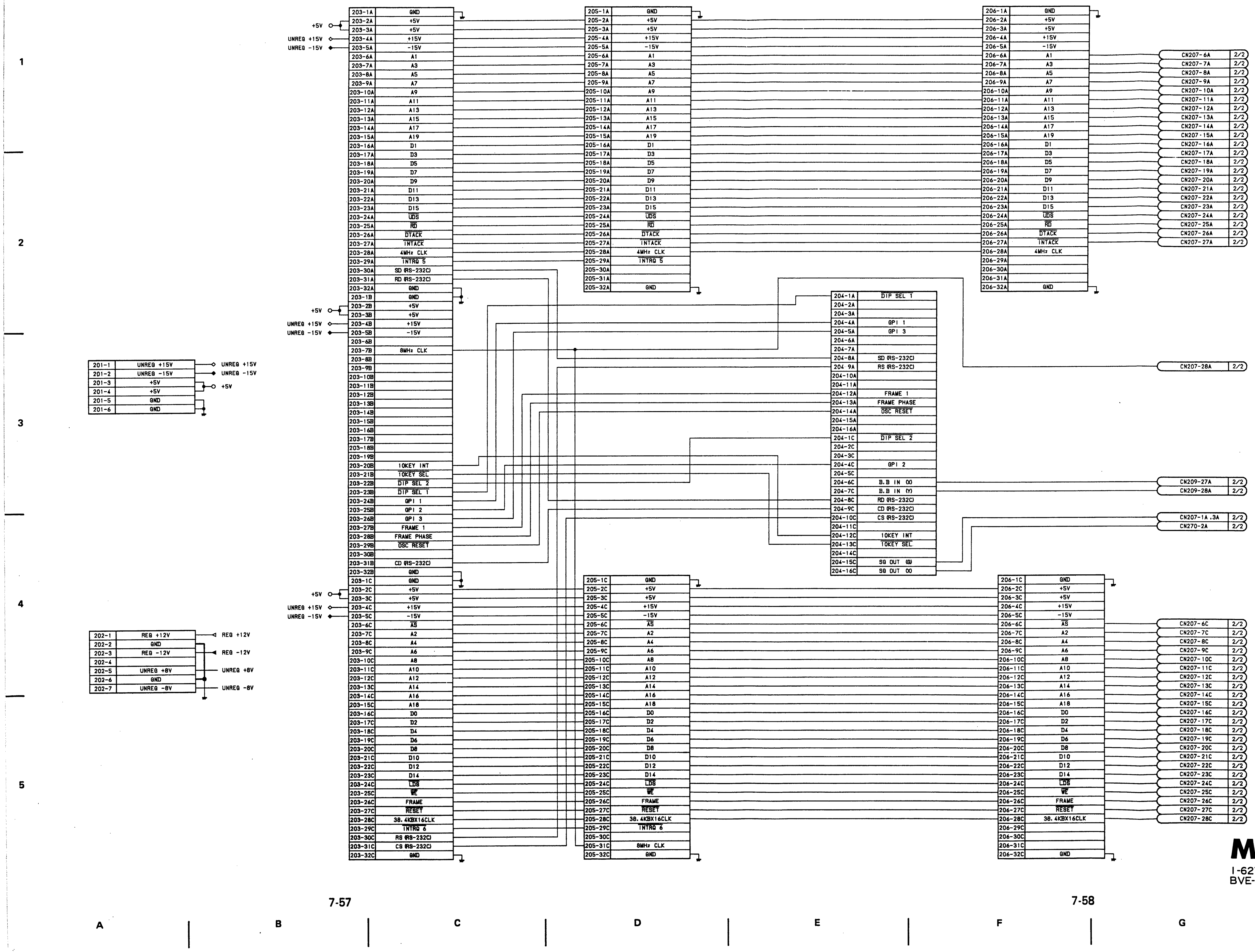
DP-77(P2); TIME COUNTER DISPLAY


D1
LB-402VK
D2
LB-402VK
D3
LB-402VK
D4
LB-402VK
16
14
2
3
1
13
15
9
11
7
6
8
12
10
4
5
401-10
B OUT 7
401-8
B OUT 6
401-3
B OUT 5
401-2
B OUT 4
401-4
B OUT 3
401-7
B OUT 2
401-9
B OUT 1
401-1
B SCAN 8
401-11
B SCAN 7
402-7
B SCAN 6
402-6
B SCAN 5
402-5
B SCAN 4
402-4
B SCAN 3
402-9
B SCAN 2
402-8
B SCAN 1
402-2
D OUT 6
402-10
D OUT 7
401-6
D OUT 8
401-5
D SCAN 1
P2
SERVO
D5
SLR-54MC3
402-1
D RET 6
402-3
D K-SCAN 2
D6
1SS119
S1
P2 RESET

DP-77(P2)

1-627-384-11(1)
BVE-600

MB-163(1/2); MOTHER BOARD


1
2
3
4
5
A
B
C
D
E
F
G
H
+5V
UNREG +15V
UNREG -15V
203-1A GND
203-2A +5V
203-3A +5V
203-4A +15V
203-5A -15V
203-6A A1
203-7A A3
203-8A A5
203-9A A7
203-10A A9
203-11A A11
203-12A A13
203-13A A15
203-14A A17
203-15A A19
203-16A D1
203-17A D3
203-18A D5
203-19A D7
203-20A D9
203-21A D11
203-22A D13
203-23A D15
203-24A UDS
203-25A RD
203-26A DTACK
203-27A INTACK
203-28A 4MHz CLK
203-29A INTRQ 5
203-30A SD (RS-232C)
203-31A RD (RS-232C)
203-32A GND
203-1B GND
203-2B +5V
203-3B +5V
203-4B +15V
203-5B -15V
203-6B
203-7B 8MHz CLK
203-8B
203-9B
203-10B
203-11B
203-12B
203-13B
203-14B
203-15B
203-16B
203-17B
203-18B
203-19B
203-20B 10KEY INT
203-21B 10KEY SEL
203-22B DIP SEL 2
203-23B DIP SEL 1
203-24B GPI 1
203-25B GPI 2
203-26B GPI 3
203-27B FRAME 1
203-28B FRAME PHASE
203-29B OSC RESET
203-30B
203-31B CD (RS-232C)
203-32B GND
203-1C GND
203-2C +5V
203-3C +5V
203-4C +15V
203-5C -15V
203-6C AS
203-7C A2
203-8C A4
203-9C A6
203-10C A8
203-11C A10
203-12C A12
203-13C A14
203-14C A16
203-15C A18
203-16C D0
203-17C D2
203-18C D4
203-19C D6
203-20C D8
203-21C D10
203-22C D12
203-23C D14
203-24C LDS
203-25C WE
203-26C FRAME
203-27C RESET
203-28C 38.4KBX16CLK
203-29C INTRQ 6
203-30C RS (RS-232C)
203-31C CS (RS-232C)
203-32C GND
201-1 UNREG +15V
201-2 UNREG -15V
201-3 +5V
201-4 +5V
201-5 GND
201-6 GND
UNREG +15V
UNREG -15V
+5V
202-1 REG +12V
202-2 GND
202-3 REG -12V
202-4
202-5 UNREG +8V
202-6 GND
202-7 UNREG -8V
REG +12V
REG -12V
UNREG +8V
UNREG -8V
205-1A GND
205-2A +5V
205-3A +5V
205-4A +15V
205-5A -15V
205-6A A1
205-7A A3
205-8A A5
205-9A A7
205-10A A9
205-11A A11
205-12A A13
205-13A A15
205-14A A17
205-15A A19
205-16A D1
205-17A D3
205-18A D5
205-19A D7
205-20A D9
205-21A D11
205-22A D13
205-23A D15
205-24A UDS
205-25A RD
205-26A DTACK
205-27A INTACK
205-28A 4MHz CLK
205-29A INTRQ 5
205-30A
205-31A
205-32A GND
205-1C GND
205-2C +5V
205-3C +5V
205-4C +15V
205-5C -15V
205-6C AS
205-7C A2
205-8C A4
205-9C A6
205-10C A8
205-11C A10
205-12C A12
205-13C A14
205-14C A16
205-15C A18
205-16C D0
205-17C D2
205-18C D4
205-19C D6
205-20C D8
205-21C D10
205-22C D12
205-23C D14
205-24C LDS
205-25C WE
205-26C FRAME
205-27C RESET
205-28C 38.4KBX16CLK
205-29C INTRQ 6
205-30C
205-31C 8MHz CLK
205-32C GND
204-1A DIP SEL 1
204-2A
204-3A
204-4A GPI 1
204-5A GPI 3
204-6A
204-7A
204-8A SD (RS-232C)
204 9A RS (RS-232C)
204-10A
204-11A
204-12A FRAME 1
204-13A FRAME PHASE
204-14A OSC RESET
204-15A
204-16A
204-1C DIP SEL 2
204-2C
204-3C
204-4C GPI 2
204-5C
204-6C B.B IN (X)
204-7C B.B IN (Y)
204-8C RD (RS-232C)
204-9C CD (RS-232C)
204-10C CS (RS-232C)
204-11C
204-12C 10KEY INT
204-13C 10KEY SEL
204-14C
204-15C SG OUT (G)
204-16C SG OUT (X)
206-1A GND
206-2A +5V
206-3A +5V
206-4A +15V
206-5A -15V
206-6A A1
206-7A A3
206-8A A5
206-9A A7
206-10A A9
206-11A A11
206-12A A13
206-13A A15
206-14A A17
206-15A A19
206-16A D1
206-17A D3
206-18A D5
206-19A D7
206-20A D9
206-21A D11
206-22A D13
206-23A D15
206-24A UDS
206-25A RD
206-26A DTACK
206-27A INTACK
206-28A 4MHz CLK
206-29A
206-30A
206-31A
206-32A GND
206-1C GND
206-2C +5V
206-3C +5V
206-4C +15V
206-5C -15V
206-6C AS
206-7C A2
206-8C A4
206-9C A6
206-10C A8
206-11C A10
206-12C A12
206-13C A14
206-14C A16
206-15C A18
206-16C D0
206-17C D2
206-18C D4
206-19C D6
206-20C D8
206-21C D10
206-22C D12
206-23C D14
206-24C LDS
206-25C WE
206-26C FRAME
206-27C RESET
206-28C 38.4KBX16CLK
206-29C
206-30C
206-31C
206-32C GND
CN207-6A 2/2
CN207-7A 2/2
CN207-8A 2/2
CN207-9A 2/2
CN207-10A 2/2
CN207-11A 2/2
CN207-12A 2/2
CN207-13A 2/2
CN207-14A 2/2
CN207-15A 2/2
CN207-16A 2/2
CN207-17A 2/2
CN207-18A 2/2
CN207-19A 2/2
CN207-20A 2/2
CN207-21A 2/2
CN207-22A 2/2
CN207-23A 2/2
CN207-24A 2/2
CN207-25A 2/2
CN207-26A 2/2
CN207-27A 2/2
CN207-28A 2/2
CN209-27A 2/2
CN209-28A 2/2
CN207-1A ,3A 2/2
CN270-2A 2/2
CN207-6C 2/2
CN207-7C 2/2
CN207-8C 2/2
CN207-9C 2/2
CN207-10C 2/2
CN207-11C 2/2
CN207-12C 2/2
CN207-13C 2/2
CN207-14C 2/2
CN207-15C 2/2
CN207-16C 2/2
CN207-17C 2/2
CN207-18C 2/2
CN207-19C 2/2
CN207-20C 2/2
CN207-21C 2/2
CN207-22C 2/2
CN207-23C 2/2
CN207-24C 2/2
CN207-25C 2/2
CN207-26C 2/2
CN207-27C 2/2
CN207-28C 2/2

MB-163(½)

1-627-388-11(1)
BVE-600

MB-163(2/2); MOTHER BOARD

CN207

A1	GND		C1	GND	
A2	REF VIDEO IN	204-C16	C2		
A3	GND		C3		
A4			C4		
A5			C5		
A6	A1	203-A6	C6	$\overline{\text{AS}}$	203-C6
A7	A3	203-A7	C7	A2	203-C7
A8	A5	203-A8	C8	A4	203-C8
A9	A7	203-A9	C9	A6	203-C9
A10	A9	203-A10	C10	A8	203-C10
A11	A11	203-A11	C11	A10	203-C11
A12	A13	203-A12	C12	A12	203-C12
A13	A15	203-A13	C13	A14	203-C13
A14	A17	203-A14	C14	A16	203-C14
A15	A19	203-A15	C15	A18	203-C15
A16	D1	203-A16	C16	D0	203-C16
A17	D3	203-A17	C17	D2	203-C17
A18	D5	203-A18	C18	D4	203-C18
A19	D7	203-A19	C19	D6	203-C19
A20	D9	203-A20	C20	D8	203-C20
A21	D11	203-A21	C21	D10	203-C21
A22	D13	203-A22	C22	D12	203-C22
A23	D15	203-A23	C23	D14	203-C23
A24	$\overline{\text{UDS}}$	203-A24	C24	$\overline{\text{LDS}}$	203-C24
A25	$\overline{\text{PD}}$	203-A25	C25	$\overline{\text{WE}}$	203-C25
A26	$\overline{\text{DTACK}}$	203-A26	C26	$\overline{\text{FRAME}}$	203-C26
A27	$\overline{\text{INTACK}}$	203-A27	C27	$\overline{\text{RESET}}$	203-C27
A28	4MHz CLOCK	203-A28	C28	38.4KBX16CK	203-C28
A29	GND (D)	203-A32	C29	GND (D)	203-C32
A30	MONI CONT	210-A28	C30	MONI R CONT	210-A27
A31	MONI B BUS CONT	210-A30	C31	MONI A BUS CONT	210-A29
A32	GND (DET)	210-A32	C32	MONI EFF CONT	210-A31

CN208

A1	GND		C1	GND	
A2	P1 MONI CONT	211-A2	C2	P1 A BUS CONT	211-C2
A3	P1 B BUS CONT	211-A3	C3	P2 MONI CONT	211-C3
A4	P2 A BUS CONT	211-A4	C4	P2 B BUS CONT	211-C4
A5	AUX A BUS CONT	211-A5	C5	AUX B BUS CONT	211-C5
A6	BG A BUS CONT	211-A6	C6	BG B BUS CONT	211-C5
A7			C7	COMPOSITE $\overline{\text{OFF}}$	211-A7
A8			C8	CHARA (S) OUT	211-A8
A9			C9	CHARA (G) OUT	211-A9
A10			C10	GND	211-A10
A11			C11	SC (U) OUT	211-A11
A12			C12	GND	211-A12
A13			C13	SC (V) OUT	211-A13
A14			C14	SYNC OUT	211-A14
A15			C15	BF OUT	211-A15
A16	GND		C16	GND	

CN209

A1	GND	202-2	C1	GND	
A2	+5V	201-3	C2	+5V	
A3	+7.5V	202-5	C3	+7.5V	
A4	+12V	202-1	C4	+12V	
A5	-12V	202-3	C5	-12V	
A6	-7.5V	202-7	C6	-7.5V	
A7	WIPE 1 OUT	212-A7	C7	WIPE 2 OUT	212-C7
A8	WIPE 3 OUT	212-A8	C8	WIPE 4 OUT	212-C8
A9	WIPE 5 OUT	212-A9	C9	WIPE 6 OUT	212-C9
A10	WIPE 7 OUT	212-A10	C10	WIPE 8 OUT	212-C10
A11	WIPE 9 OUT	212-A11	C11	WIPE 10 OUT	212-C11
A12	WIPE 11 OUT	212-A12	C12	MIX ON	212-C12
A13	WIPE ON	212-A13	C13	TITLE ON	212-C13
A14	MANUAL ON	212-A14	C14	-5V OUT	216-3
A15	AUTO TRANTSITION	212-A15	C15		
A16			C16		
A17			C17	BG (Y) OUT	215-A17
A18	LUMINANCE	217-1	C18	GND	215-A18
A19	COLOR	217-2	C19	BG (P-Y) OUT	215-A19
A20	HUE (SW)	217-3	C20	GND	215-A20
A21	HUE (COS)	217-4	C21	BG (B-Y) OUT	215-A21
A22	GND	217-5	C22	GND	215-A22
A23			C23	MAT (Y) OUT	212-A23
A24			C24	GND	212-A24
A25			C25	MAT (P-Y) OUT	212-A25
A26			C26	GND	212-A26
A27			C27	MAT (B-Y) OUT	212-A27
A28			C28	CLUMP PULSE OUT	212-A28
A29	B.B ON	217-9	C29	BLK OUT	212-A29
A30	B.G ON	217-10	C30	HP OUT	212-A30
A31			C31	VP OUT	212-A31
A32	GND		C32	GND	

CN210

A1	GND		C1	GND	
A2			C2	MONI (Y) IN	213-A2
A3			C3	GND	213-A3
A4			C4	A BUS (Y) IN	213-A4
A5			C5	GND	213-A5
A6			C6	B BUS (Y) IN	213-A6
A7			C7	GND	213-A7
A8			C8	EFF (Y) IN	213-A8
A9			C9	GND	213-A9
A10			C10	MONI (R-Y) IN	213-A10
A11			C11	GND	213-A11
A12			C12	A BUS (R-Y) IN	213-A12
A13			C13	GND	213-A13
A14			C14	B BUS (R-Y) IN	213-A14
A15			C15	GND	213-A15
A16			C16	EFF (R-Y) IN	213-A16
A17			C17	GND	213-A17
A18			C18	MONI (B-Y) IN	213-A18
A19			C19	GND	213-A19
A20			C20	A BUS (B-Y) IN	213-A20
A21			C21	GND	213-A21
A22			C22	B BUS (B-Y) IN	213-A22
A23			C23	GND	213-A23
A24			C24	EFF (B-Y) IN	213-A24
A25			C25	GND	213-A25
A26			C26	LINE (Y) IN	213-A26
A27	MONI R CONT	207-C30	C27	GND	213-A27
A28	MONI CONT	207-A30	C28	LINE (R-Y) IN	213-A28
A29	MONI A BUS CONT	207-C31	C29	GND	213-A29
A30	MONI B BUS CONT	207-A31	C30	LINE (B-Y) IN	213-A30
A31	MONI EFF CONT	207-C32	C31		
A32	GND		C32	GND	

CN211

A1	GND		C1	GND	
A2	P1 MONI CONT	214-A2	C2	P1 A BUS CONT	214-A3
A3	P1 B BUS CONT	214-A4	C3	P2 MONI CONT	214-A5
A4	P2 A BUS CONT	214-A6	C4	P2 B BUS CONT	214-A7
A5	AUX A BUS CONT	214-A8	C5	AUX B BUS CONT	214-A9
A6	BG A BUS CONT	214-A10	C6	BG B BUS CONT	214-A11
A7	COMPOSITE $\overline{\text{OFF}}$	208-C7	C7		
A8	CHARA (S) IN	208-C8	C8		
A9	CHARA (G) IN	208-C9	C9		
A10	GND	208-C10	C10		
A11	SC (U) IN	208-C11	C11		
A12	GND	208-C12	C12		
A13	SC (V) IN	208-C13	C13		
A14	SYNC IN	208-C14	C14		
A15	BF IN	208-C15	C15		
A16	GND		C16	GND	

CN212

A1	GND		C1	GND	
A2	+5V		C2	+5V	
A3	+7.5V		C3	+7.5V	
A4	+12V		C4	+12V	
A5	-12V		C5	-12V	
A6	-7.5V		C6	-7.5V	
A7	WIPE 1 IN	209-A7	C7	WIPE 2 IN	209-C7
A8	WIPE 3 IN	209-A8	C8	WIPE 4 IN	209-C8
A9	WIPE 5 IN	209-A9	C9	WIPE 6 IN	209-C9
A10	WIPE 7 IN	209-A10	C10	WIPE 8 IN	209-C10
A11	WIPE 9 IN	209-A11	C11	WIPE 10 IN	209-C11
A12	WIPE 11 IN	209-A12	C12	MIX ON	209-C12
A13	WIPE ON	209-A13	C13	TITLE ON	209-C13
A14	MANUAL ON	209-A14	C14	MANUAL DC	217-7
A15	AUTO TRANSITION	209-A15	C15	WIPE REV ON	218-1
A16	SOFTNESS	217-6	C16	HORDER ON	217-8
A17	BG (V) IN	209-C17	C17	BG (Y) OUT	212-A17
A18	GND	209-C18	C18	GND	212-A18
A19	BG (R-Y) IN	209-C19	C19	BG (R-Y) OUT	212-A19
A20	GND	209-C20	C20	GND	212-A20
A21	BG (B-Y) IN	209-C21	C21	BG (B-Y) OUT	212-A21
A22	GND	209-C22	C22	GND	215-A22
A23	MAT (Y) IN	209-C23	C23	MAT (Y) OUT	215-A23
A24	GND	209-C24	C24	GND	215-A24
A25	MAT (R-Y) IN	209-C25	C25	MAT (R-Y) OUT	215-A25
A26	GND	209-C26	C26	GND	215-A26
A27	MAT (B-Y) IN	209-C27	C27	MAT (B-Y) OUT	215-A27
A28	CLUMP PULSE IN	209-C28	C28	GND	215-A28
A29	BLK IN	209-C29	C29	KEY-1 OUT	215-A29
A30	HP IN	209-C30	C30	GND	215-A30
A31	VP IN	209-C31	C31	KEY-2 OUT	215-A31
A32	GND		C32	GND	

CN213

A1	GND		C1
A2	MONI (Y) OUT	210-C2	C2
A3	GND	210-C3	C3
A4	A BUS (Y) OUT	210-C4	C4
A5	GND	210-C5	C5
A6	B BUS (Y) OUT	210-C6	C6
A7	GND	210-C7	C7
A8	EFF (Y) OUT	210-C8	C8
A9	GND	210-C9	C9
A10	MONI (R-Y) OUT	210-C10	C10
A11	GND	210-C11	C11
A12	A BUS (R-Y) OUT	210-C12	C12
A13	GND	210-C13	C13
A14	B BUS (R-Y) OUT	210-C14	C14
A15	GND	210-C15	C15
A16	EFF (R-Y) OUT	210-C16	C16
A17	GND	210-C17	C17
A18	MONI (B-Y) OUT	210-C18	C18
A19	GND	210-C19	C19
A20	A BUS (B-Y) OUT	210-C20	C20
A21	GND	210-C21	C21
A22	B BUS (B-Y) OUT	210-C22	C22
A23	GND	210-C23	C23
A24	EFF (B-Y) OUT	210-C24	C24
A25	GND	210-C25	C25
A26	LINE (Y) OUT	210-C26	C26
A27	GND	210-C27	C27
A28	LINE (R-Y) OUT	210-C28	C28
A29	GND	210-C29	C29
A30	LINE (B-Y) OUT	210-C30	C30
A31			C31
A32	GND		C32

CN214

A1	GND		C1
A2	P1 MONI CONT	211-A2	C2
A3	P1 A BUS CONT	211-C2	C3
A4	P1 B BUS CONT	211-A3	C4
A5	P2 MONI CONT	211-C3	C5
A6	P2 A BUS CONT	211-A4	C6
A7	P2 B BUS CONT	211-C4	C7
A8	AUX A BUS CONT	211-A5	C8
A9	AUX B BUS CONT	211-C5	C9
A10	BG A BUS CONT	211-A6	C10
A11	BG B BUS CONT	211-C6	C11
A12	COMPOSITE $\overline{\text{OFF}}$	211-A7	C12
A13			C13
A14	SYNC IN	211-A14	C14
A15	BF IN	211-A15	C15
A16	GND		C16

NOTE; When the composite switcher board is used, CN213, 214 and 215 are not used.

GND		C1	GND	
		C2	MONI (Y) IN	213-A2
		C3	GND	213-A3
		C4	A BUS (Y) IN	213-A4
		C5	GND	213-A5
		C6	B BUS (Y) IN	213-A6
		C7	GND	213-A7
		C8	EFF (Y) IN	213-A8
		C9	GND	213-A9
		C10	MONI (R-Y) IN	213-A10
		C11	GND	213-A11
		C12	A BUS (R-Y) IN	213-A12
		C13	GND	213-A13
		C14	B BUS (R-Y) IN	213-A14
		C15	GND	213-A15
		C16	EFF (R-Y) IN	213-A16
		C17	GND	213-A17
		C18	MONI (B-Y) IN	213-A18
		C19	GND	213-A19
		C20	A BUS (B-Y) IN	213-A20
		C21	GND	213-A21
		C22	B BUS (B-Y) IN	213-A22
		C23	GND	213-A23
		C24	EFF (B-Y) IN	213-A24
		C25	GND	213-A25
		C26	LINE (Y) IN	213-A26
MONI R CONT	207-C30	C27	GND	213-A27
MONI CONT	207-A30	C28	LINE (R-Y) IN	213-A28
NI A BUS CONT	207-C31	C29	GND	213-A29
NI B BUS CONT	207-A31	C30	LINE (B-Y) IN	213-A30
ONI EFF CONT	207-C32	C31		
GND		C32	GND	

GND		C1	GND	
1 MONI CONT	214-A2	C2	P1 A BUS CONT	214-A3
1 B BUS CONT	214-A4	C3	P2 MONI CONT	214-A5
2 A BUS CONT	214-A6	C4	P2 B BUS CONT	214-A7
X A BUS CONT	214-A8	C5	AUX B BUS CONT	214-A9
G A BUS CONT	214-A10	C6	BG B BUS CONT	214-A11
POSITE $\overline{\text{OFF}}$	208-C7	C7		
CHARA (S) IN	208-C8	C8		
CHARA (Q) IN	208-C9	C9		
GND	208-C10	C10		
SC (U) IN	208-C11	C11		
GND	208-C12	C12		
SC (V) IN	208-C13	C13		
SYNC IN	208-C14	C14		
BF IN	208-C15	C15		
GND		C16	GND	

CN212

A1	GND		C1	GND	
A2	+5V		C2	+5V	
A3	+7.5V		C3	+7.5V	
A4	+12V		C4	+12V	
A5	-12V		C5	-12V	
A6	-7.5V		C6	-7.5V	
A7	WIPE 1 IN	209-A7	C7	WIPE 2 IN	209-C7
A8	WIPE 3 IN	209-A8	C8	WIPE 4 IN	209-C8
A9	WIPE 5 IN	209-A9	C9	WIPE 6 IN	209-C9
A10	WIPE 7 IN	209-A10	C10	WIPE 8 IN	209-C10
A11	WIPE 9 IN	209-A11	C11	WIPE 10 IN	209-C11
A12	WIPE 11 IN	209-A12	C12	MIX ON	209-C12
A13	WIPE ON	209-A13	C13	TITLE ON	209-C13
A14	MANUAL ON	209-A14	C14	MANUAL DC	217-7
A15	AUTO TRANSITION	209-A15	C15	WIPE REV ON	218-1
A16	SOFTNESS	217-6	C16	HORDER ON	217-8
A17	BG (V) IN	209-C17	C17	BG (Y) OUT	212-A17
A18	GND	209-C18	C18	GND	212-A18
A19	BG (R-Y) IN	209-C19	C19	BG (R-Y) OUT	212-A19
A20	GND	209-C20	C20	GND	212-A20
A21	BG (B-Y) IN	209-C21	C21	BG (B-Y) OUT	212-A21
A22	GND	209-C22	C22	GND	215-A22
A23	MAT (Y) IN	209-C23	C23	MAT (Y) OUT	215-A23
A24	GND	209-C24	C24	GND	215-A24
A25	MAT (R-Y) IN	209-C25	C25	MAT (R-Y) OUT	215-A25
A26	GND	209-C26	C26	GND	215-A26
A27	MAT (B-Y) IN	209-C27	C27	MAT (B-Y) OUT	215-A27
A28	CLUMP PULSE IN	209-C28	C28	GND	215-A28
A29	BLK IN	209-C29	C29	KEY-1 OUT	215-A29
A30	HP IN	209-C30	C30	GND	215-A30
A31	VP IN	209-C31	C31	KEY-2 OUT	215-A31
A32	GND		C32	GND	

CN213

A1	GND		C1	GND	
A2	MONI (Y) OUT	210-C2	C2		
A3	GND	210-C3	C3	GND	
A4	A BUS (Y) OUT	210-C4	C4		
A5	GND	210-C5	C5	GND	
A6	B BUS (Y) OUT	210-C6	C6		
A7	GND	210-C7	C7	GND	
A8	EFF (Y) OUT	210-C8	C8		
A9	GND	210-C9	C9	GND	
A10	MONI (R-Y) OUT	210-C10	C10	MONI (R-Y) OUT	214-C2
A11	GND	210-C11	C11	GND	214-C3
A12	A BUS (R-Y) OUT	210-C12	C12	A BUS (R-Y) OUT	214-C4
A13	GND	210-C13	C13	GND	214-C5
A14	B BUS (R-Y) OUT	210-C14	C14	B BUS (R-Y) OUT	214-C6
A15	GND	210-C15	C15	GND	214-C7
A16	EFF (R-Y) OUT	210-C16	C16	EFF (R-Y) OUT	214-C8
A17	GND	210-C17	C17	GND	214-C9
A18	MONI (B-Y) OUT	210-C18	C18	MONI (B-Y) OUT	215-C7
A19	GND	210-C19	C19	GND	215-C8
A20	A BUS (B-Y) OUT	210-C20	C20	A BUS (B-Y) OUT	215-C9
A21	GND	210-C21	C21	GND	215-C10
A22	B BUS (B-Y) OUT	210-C22	C22	B BUS (B-Y) OUT	215-C11
A23	GND	210-C23	C23	GND	215-C12
A24	EFF (B-Y) OUT	210-C24	C24	EFF (B-Y) OUT	215-C13
A25	GND	210-C25	C25	GND	215-C14
A26	LINE (Y) OUT	210-C26	C26		
A27	GND	210-C27	C27	GND	214-C11
A28	LINE (R-Y) OUT	210-C28	C28	LINE (R-Y) OUT	214-C10
A29	GND	210-C29	C29	GND	215-C16
A30	LINE (B-Y) OUT	210-C30	C30	LINE (B-Y) OUT	215-C15
A31			C31		
A32	GND		C32	GND	

CN214

A1	GND		C1	GND	
A2	P1 MONI CONT	211-A2	C2	MONI (R-Y) OUT	213-C10
A3	P1 A BUS CONT	211-C2	C3	GND	213-C11
A4	P1 B BUS CONT	211-A3	C4	A BUS (R-Y) OUT	213-C12
A5	P2 MONI CONT	211-C3	C5	GND	213-C13
A6	P2 A BUS CONT	211-A4	C6	B BUS (R-Y) OUT	213-C14
A7	P2 B BUS CONT	211-C4	C7	GND	213-C15
A8	AUX A BUS CONT	211-A5	C8	EFF (R-Y) OUT	213-C16
A9	AUX B BUS CONT	211-C5	C9	GND	213-C17
A10	BG A BUS CONT	211-A6	C10	LINE (R-Y) OUT	213-C28
A11	BG B BUS CONT	211-C6	C11	GND	213-C27
A12	COMPOSITE $\overline{\text{OFF}}$	211-A7	C12		
A13			C13		
A14	SYNC IN	211-A14	C14		
A15	BF IN	211-A15	C15		
A16	GND		C16	GND	

CN215

A1	GND		C1	GND	
A2	+5V		C2	+5V	
A3	+7.5V		C3	+7.5V	
A4	+12V		C4	+12V	
A5	-12V		C5	-12V	
A6	-7.5V		C6	-7.5V	
A7			C7	MONI (B-Y) OUT	213-C18
A8			C8	GND	213-C19
A9			C9	A BUS (B-Y) OUT	213-C20
A10			C10	GND	213-C21
A11			C11	B BUS (B-Y) OUT	213-C22
A12			C12	GND	213-C23
A13			C13	EFF (B-Y) OUT	213-C24
A14			C14	GND	213-C25
A15			C15	LINE (B-Y) OUT	213-C30
A16			C16	GND	213-C29
A17	BG (Y) IN	212-C17	C17		
A18	GND	212-C18	C18		
A19	BG (R-Y) IN	212-C19	C19		
A20	GND	212-C20	C20		
A21	BG (B-Y) IN	212-C21	C21		
A22	GND	209-C22	C22		
A23	MAT (Y) IN	212-C23	C23		
A24	GND	212-C24	C24		
A25	MAT (R-Y) IN	212-C25	C25		
A26	GND	212-C26	C26		
A27	MAT (B-Y) IN	212-C27	C27		
A28	GND	212-C28	C28		
A29	KEY-1 IN	212-C29	C29		
A30	GND	212-C30	C30		
A31	KEY-2 IN	212-C31	C31		
A32	GND		C32	GND	

CN216

1	+5V	
2	GND	
3	-5V	
4	+12V	
5	GND	
6	-12V	

CN217

1	LUMINANCE	209-A18
2	COLOR	209-A19
3	HUE (SIN)	209-A20
4	HUE (COS)	209-A21
5	GND	209-A22
6	SOFTNESS	212-A16
7	MANUAL DC	212-C14
8	BORDER ON	212-C16
9	B.B ON	209-A29
10	B.G ON	209-A30

CN218

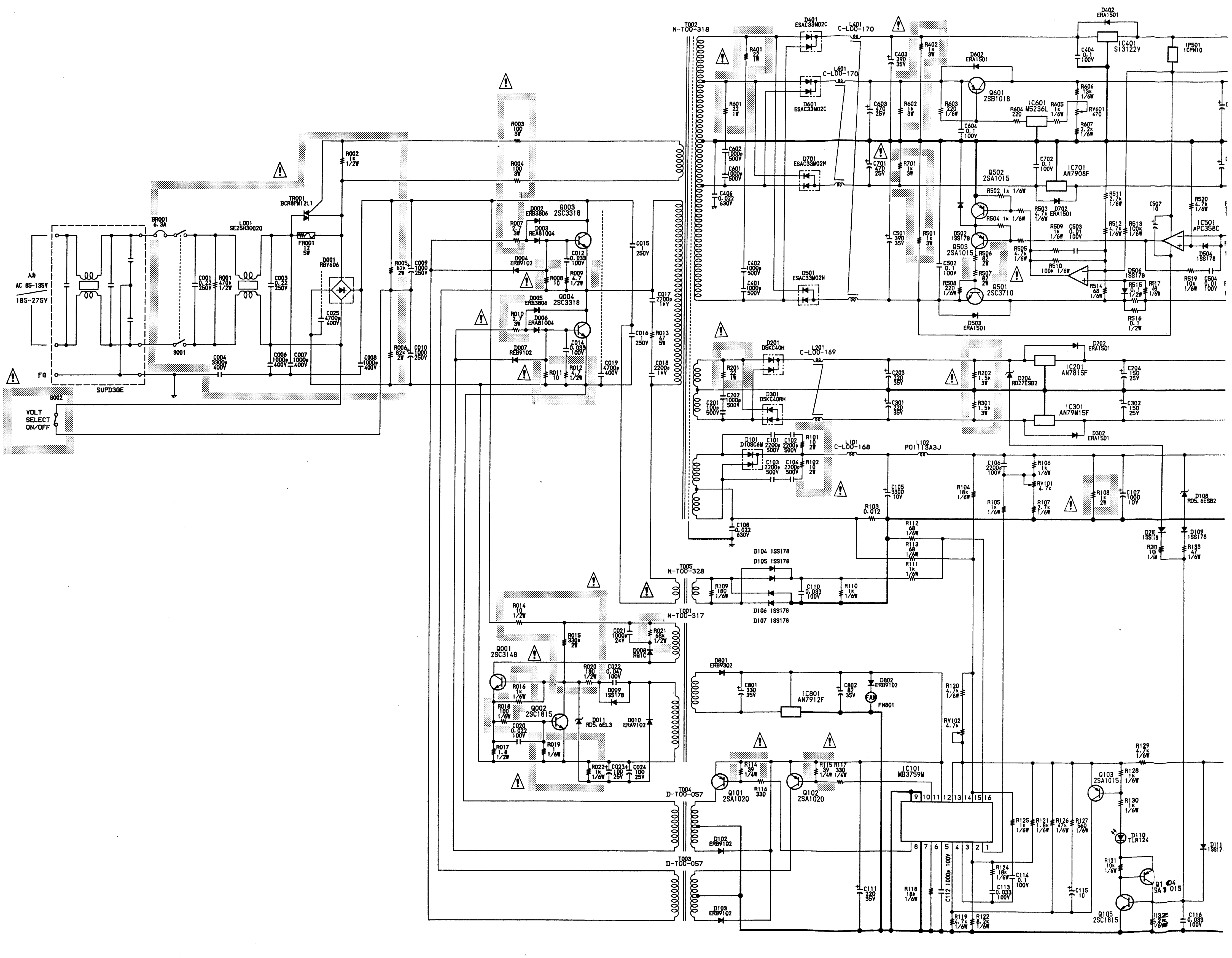
1	WIPE REV ON	212-C15
2	GND	

MB-163(2⁄2)

1-627-388-11(1)
BVE-600

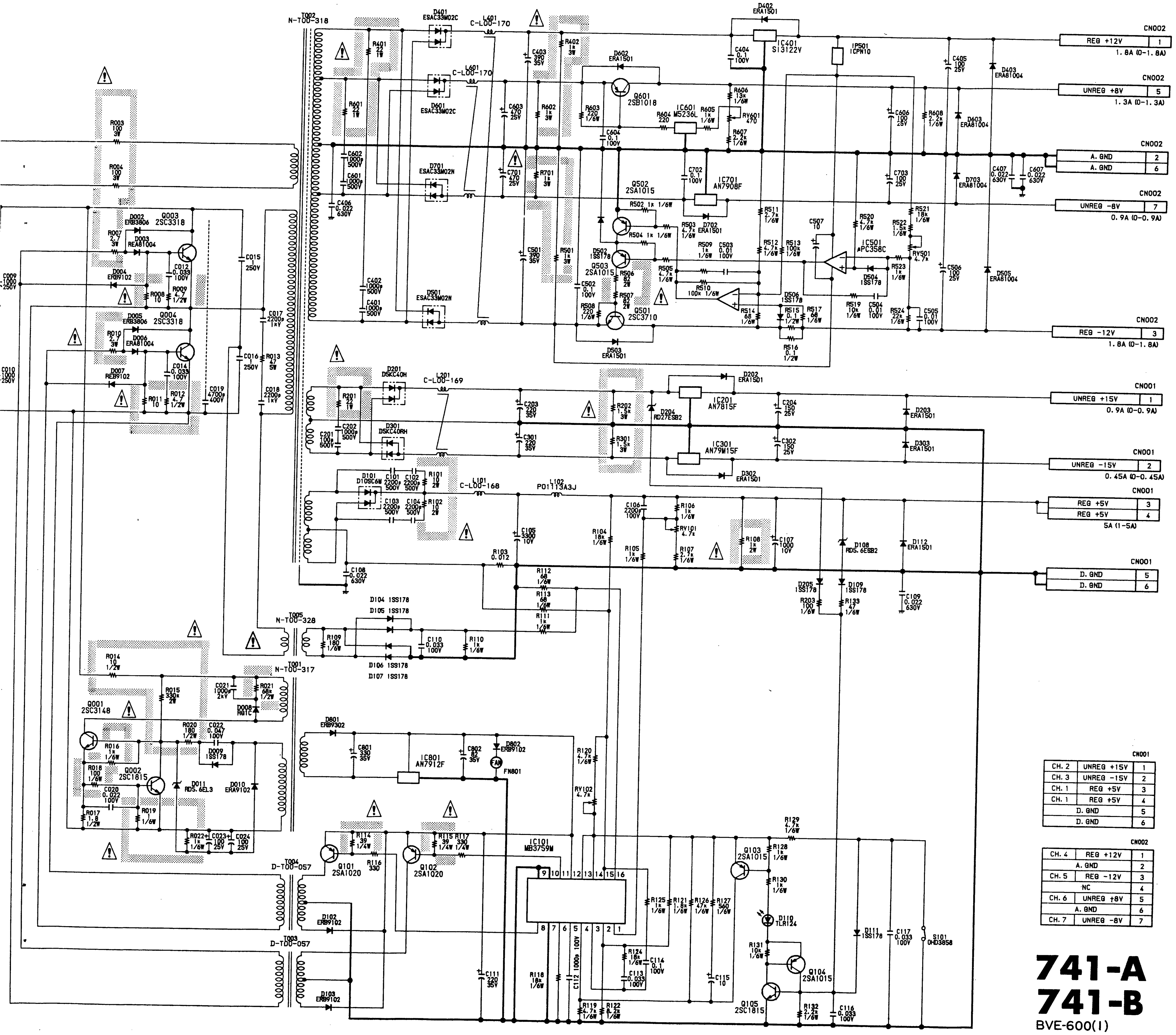
OTE; When the composite switcher board is used, CN213, 214 and 215 are not used.

741-A; SWITCHING REGULATOR
741-B; SWITCHING REGULATOR


1
2
3
4
5
A
B
C
D
E
F
G
H
AC 85-135V
185-275V
FG
SUPD38E
S001
S002
VOLT SELECT ON/OFF
BR001 6.3A
L001 SE25H30020
TR001 BCR8PM12L1
FR001 12 5W
D001 RBV606
C025 4700μ 400V
C001 0.22 250V
R001 470k 1/2W
C003 0.22 250V
C004 3300p 400V
C006 1000p 400V
C007 1000p 400V
C008 1000p 400V
R002 1k 1/2W
R003 100 3W
R004 100 3W
R005 82k 2W
R006 82k 2W
C009 1000 250V
C010 1000 250V
Q003 2SC3318
Q004 2SC3318
D002 ERB3806
D003 REA81004
D004 ERB9102
D005 ERB3806
D006 ERA81004
D007 REB9102
R007 2.7 3W
R008 10
R009 4.7 1/2W
R010 2.7 3W
R011 10
R012 4.7 1/2W
C012 0.033 100V
C014 0.033 100V
C015 250V
C016 250V
C017 2200p 1kV
C018 2200p 1kV
C019 4700p 400V
R013 47 5W
T002 N-T00-318
T005 N-T00-328
T001 N-T00-317
Q001 2SC3148
Q002 2SC1815
R014 10 1/2W
R015 330k 2W
R016 1k 1/6W
R017 1.8 1/2W
R018 100 1/6W
R019 1 1/6W
R020 180 1/2W
R021 68k 1/2W
R022 1k 1/6W
C020 0.022 100V
C021 1000p 2kV
C022 0.047 100V
C023 100 25V
C024 100 25V
D008 R6TC
D009 1SS178
D010 ERA9102
D011 RD5.6EL3
D401 ESAC33M02C
L401 C-L00-170
C403 390 35V
R401 22 1W
R402 1k 3W
R601 22 1W
C601 1000p 500V
C602 1000p 500V
C603 470 25V
R602 1k 3W
L601 C-L00-170
C406 0.022 630V
D701 ESAC33M02N
C701 470 25V
R701 1k 3W
C401 1000p 500V
C402 1000p 500V
D501 ESAC33M02N
C501 390 35V
R501 1k 3W
D402 ERA1501
IC401 SI3122V
C404 0.1 100V
IPS01 ICPN10
D602 ERA1501
Q601 2SB1018
R603 220 1/6W
C604 0.1 100V
IC601 M5236L
R604 220
R605 1k 1/6W
R606 13k 1/6W
RV601 470
R607 2.2k 1/6W
Q502 2SA1015
C702 0.1 100V
IC701 AN7908F
R502 1k 1/6W
R503 4.7k 1/6W
D702 ERA1501
R504 1k 1/6W
D502 1SS178
Q503 2SA1015
R505 4.7k 1/6W
R506 82 2W
R507 82 2W
C502 0.1 100V
R508 220 1/6W
Q501 2SC3710
D503 ERA1501
R509 1k 1/6W
C503 0.01 100V
R510 100k 1/6W
R511 2.7k 1/6W
R512 4.7k 1/6W
R513 100k 1/6W
R514 68 1/6W
R515 0.1 1/2W
R516 0.1 1/2W
R517 68 1/6W
D505 1SS178
D504 1SS178
C507 10
IC501 μPC358C
R520 4.7k 1/6W
R519 10k 1/6W
C504 0.01 100V
D201 D5KC40H
L201 C-L00-169
R201 22 1W
C201 1000p 500V
C202 1000p 500V
C203 220 35V
D301 D5KC40RH
C301 220 35V
R202 1.5k 3W
R301 1.5k 3W
D204 RD27ESB2
IC201 AN7815F
D202 ERA1501
C204 150 25V
IC301 AN79M15F
C302 150 25V
D302 ERA1501
D101 D10SC6M
C101 2200p 500V
C102 2200p 500V
C103 2200p 500V
C104 2200p 500V
R101 10 2W
R102 10 2W
L101 C-L00-168
L102 P01113A3J
C105 3300 10V
C106 2200p 100V
R106 1k 1/6W
RV101 4.7k
R107 2.7k 1/6W
R104 16k 1/6W
R105 1k 1/6W
R108 1k 2W
C107 1000 10V
D108 RD5.6ESB2
C108 0.022 630V
R103 0.012
R112 68 1/6W
R113 68 1/6W
R111 1k 1/6W
D104 1SS178
D105 1SS178
D106 1SS178
D107 1SS178
R109 180 1/6W
C110 0.033 100V
R110 1k 1/6W
D801 ERB9302
C801 330 35V
IC801 AN7912F
C802 82 35V
D802 ERB9102
FN801
R120 4.7k 1/6W
RV102 4.7k
R114 39 1/4W
R115 39 1/4W
R116 330
R117 330
Q101 2SA1020
Q102 2SA1020
T004 D-T00-057
T003 D-T00-057
D102 ERB9102
D103 ERB9102
IC101 MB3759M
9 10 11 12 13 14 15 16
8 7 6 5 4 3 2 1
C111 220 35V
R118 18k 1/6W
C112 1000p 100V
R119 4.7k 1/6W
R122 8.2k 1/6W
R124 18k 1/6W
C113 0.033 100V
C114 0.1 100V
R125 1k 1/6W
R121 1.8k 1/6W
R126 47k 1/6W
R127 560 1/6W
C115 10
R129 4.7k 1/6W
Q103 2SA1015
R128 1k 1/6W
R130 1k 1/6W
D110 TLR124
R131 10k 1/6W
Q104 2SA1015
Q105 2SC1815
R132 1/6W
C116 0.033 100V
D109 1SS178
R133 47 1/6W
D251 1SS178
R213 10 1/6W
D111 1SS17

NOTE:

The shaded and ⚠-marked components are critical to safety.
Replace only with same components as specified.


T002 N-T00-318
D401 ESAC33M02C
L401 C-L00-170
D601 ESAC33M02C
D701 ESAC33M02N
D501 ESAC33M02N
D402 ERA1501
IC401 SI3122V
IPS01 ICPN10
Q601 2SB1018
IC601 M5236L
IC701 AN7908F
Q502 2SA1015
Q503 2SA1015
Q501 2SC3710
IC501 μPC358C
D503 ERA1501
Q003 2SC3318
Q004 2SC3318
D201 DSKC40H
D301 DSKC40RH
L201 C-L00-169
IC201 AN7815F
IC301 AN79M15F
D204 RD27ESB2
D101 D10SC6M
L101 C-L00-168
L102 P01113A3J
D108 RD5.6ESB2
T005 N-T00-328
T001 N-T00-317
D104 1SS178
D105 1SS178
D106 1SS178
D107 1SS178
Q001 2SC3148
Q002 2SC1815
D801 ERB9302
IC801 AN7912F
FN801
IC101 MB3759M
Q101 2SA1020
Q102 2SA1020
Q103 2SA1015
Q104 2SA1015
Q105 2SC1815
D110 TLR124
S101 OHD3858
T004 D-T00-057
T003 D-T00-057
CN002
REG +12V 1
1.8A (0-1.8A)
UNREG +8V 5
1.3A (0-1.3A)
A.GND 2
A.GND 6
UNREG -8V 7
0.9A (0-0.9A)
REG -12V 3
1.8A (0-1.8A)
CN001
UNREG +15V 1
0.9A (0-0.9A)
UNREG -15V 2
0.45A (0-0.45A)
REG +5V 3
REG +5V 4
5A (1-5A)
D.GND 5
D.GND 6

CN001

CH. 2	UNREG +15V	1
CH. 3	UNREG -15V	2
CH. 1	REG +5V	3
CH. 1	REG +5V	4
D. GND		5
D. GND		6

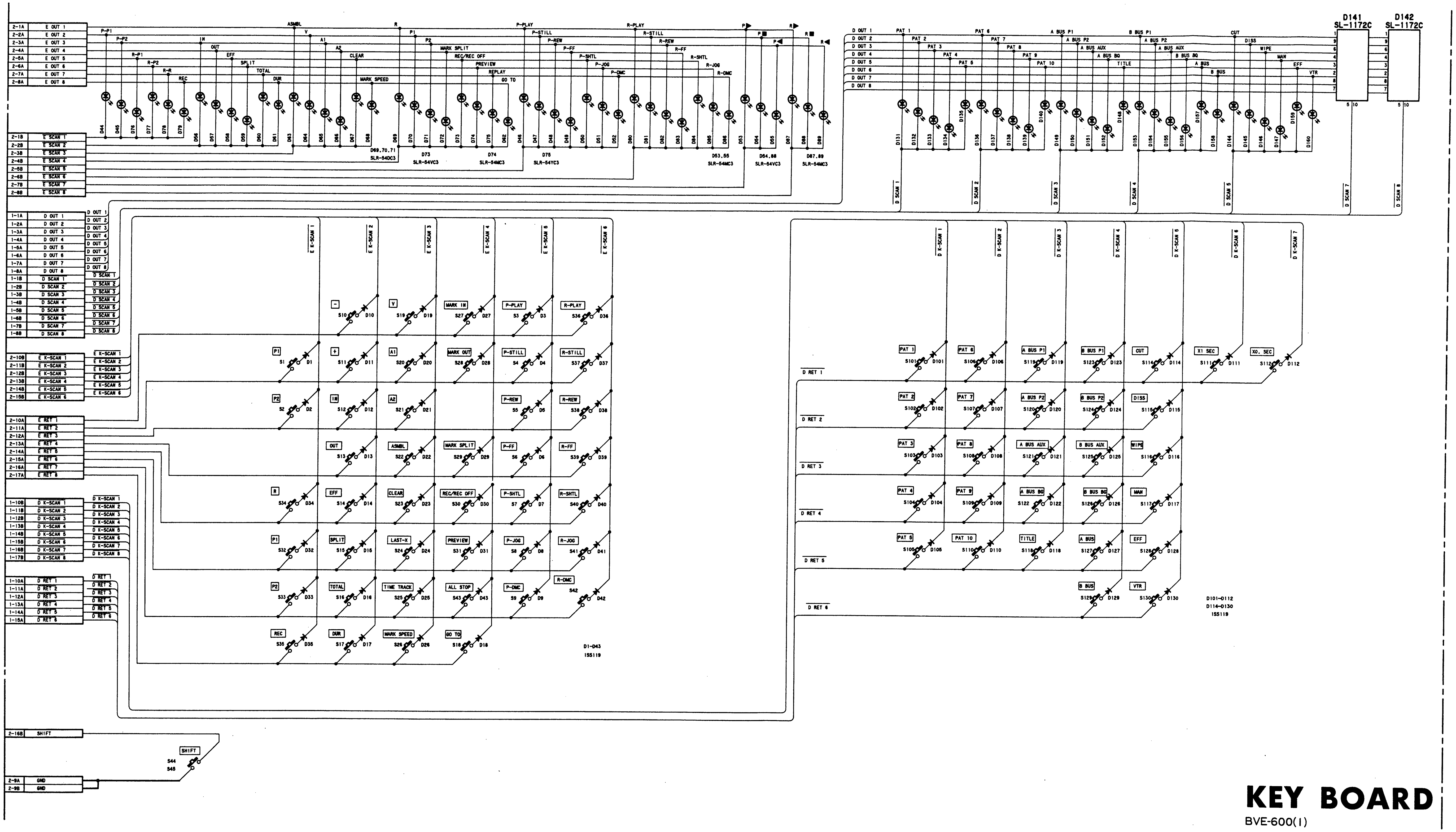
CN002

CH. 4	REG +12V	1
A. GND		2
CH. 5	REG -12V	3
NC		4
CH. 6	UNREG +8V	5
A. GND		6
CH. 7	UNREG -8V	7

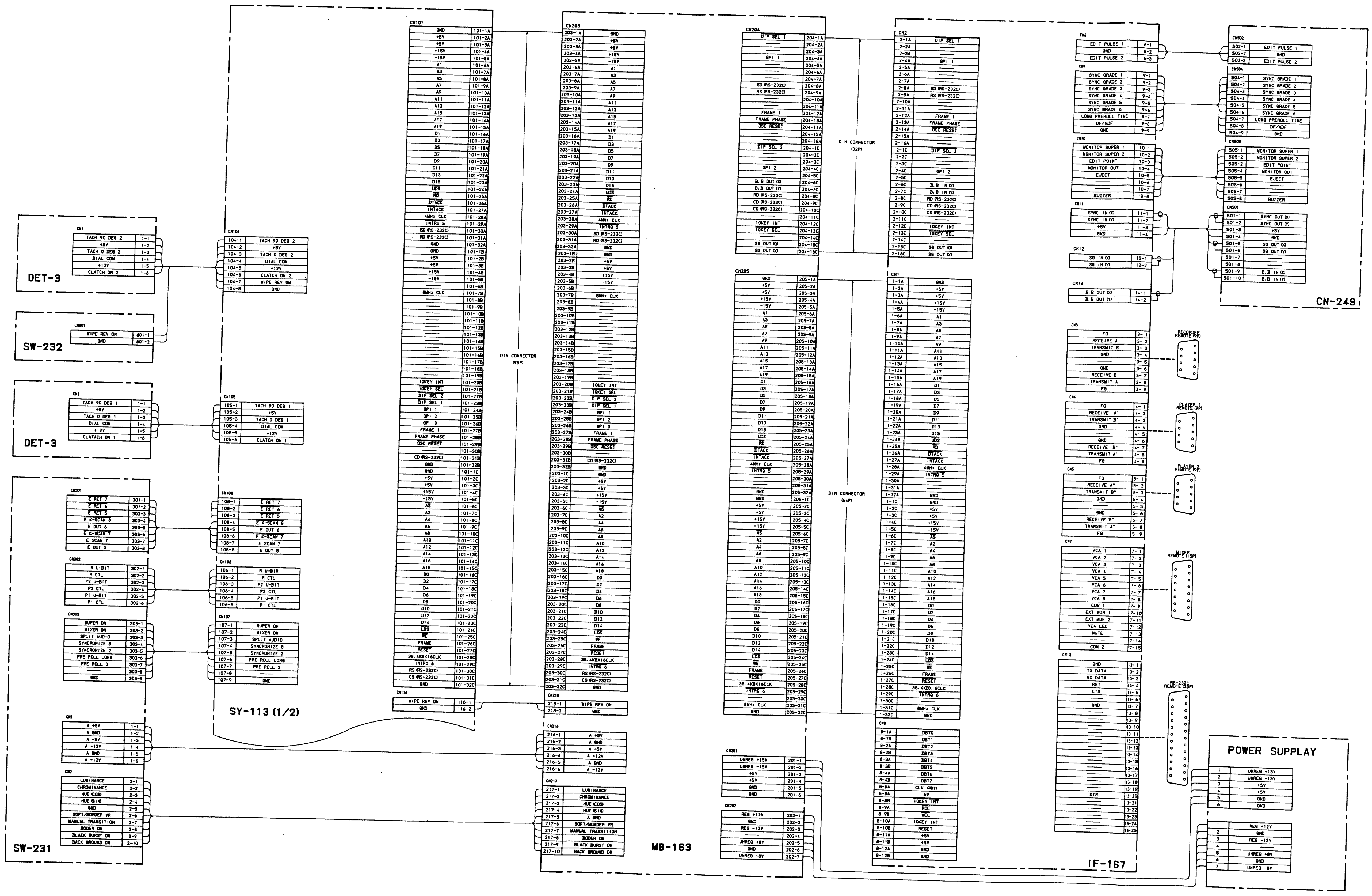
741-A
741-B

BVE-600(1)

KEY BOARD

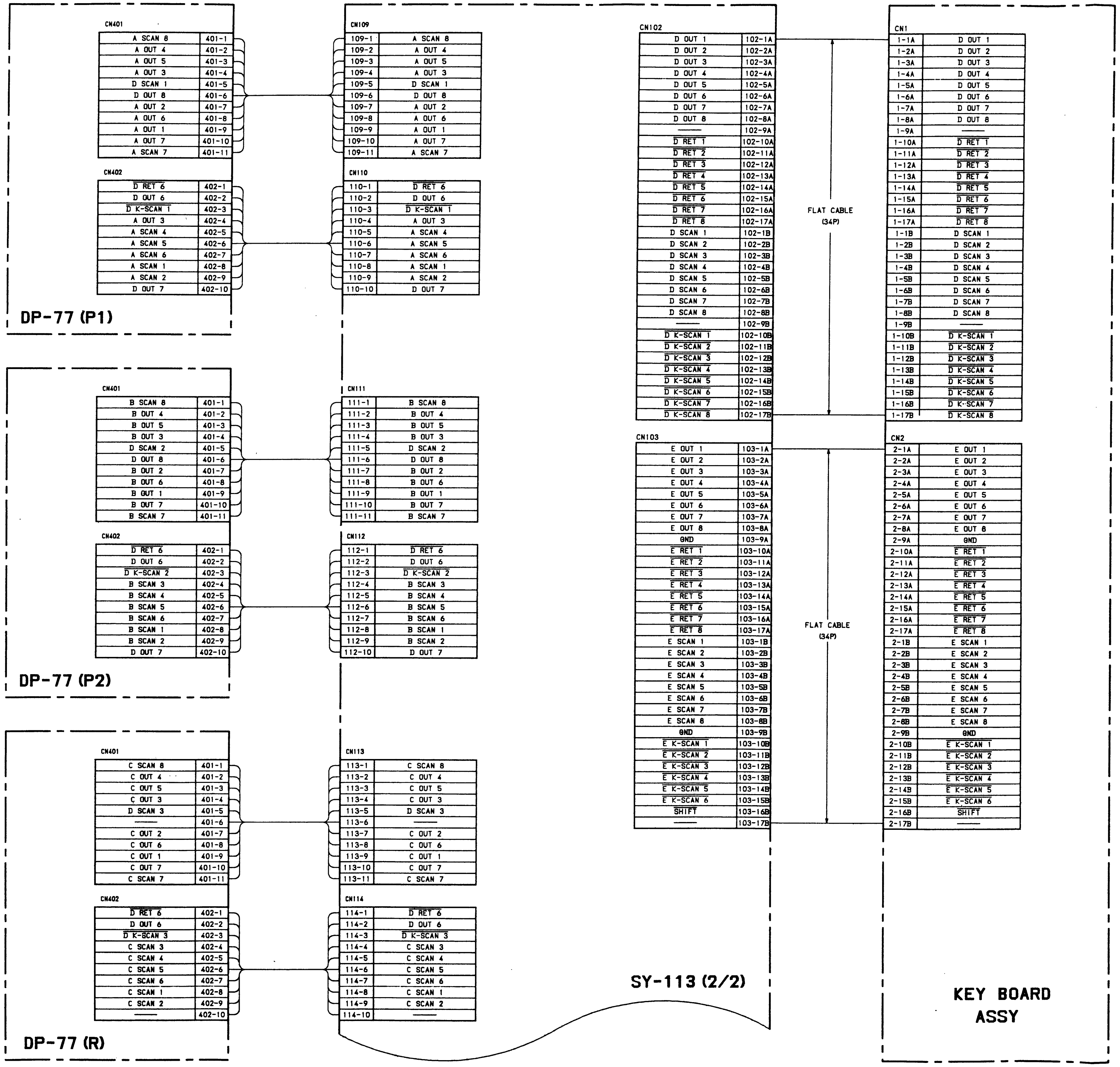

1
2
3
4
5
E OUT 1
E OUT 2
E OUT 3
E OUT 4
E OUT 5
E OUT 6
E OUT 7
E OUT 8
E SCAN 1
E SCAN 2
E SCAN 3
E SCAN 4
E SCAN 5
E SCAN 6
E SCAN 7
E SCAN 8
D OUT 1
D OUT 2
D OUT 3
D OUT 4
D OUT 5
D OUT 6
D OUT 7
D OUT 8
D SCAN 1
D SCAN 2
D SCAN 3
D SCAN 4
D SCAN 5
D SCAN 6
D SCAN 7
D SCAN 8
E K-SCAN 1
E K-SCAN 2
E K-SCAN 3
E K-SCAN 4
E K-SCAN 5
E K-SCAN 6
E RET 1
E RET 2
E RET 3
E RET 4
E RET 5
E RET 6
E RET 7
E RET 8
D K-SCAN 1
D K-SCAN 2
D K-SCAN 3
D K-SCAN 4
D K-SCAN 5
D K-SCAN 6
D K-SCAN 7
D K-SCAN 8
D RET 1
D RET 2
D RET 3
D RET 4
D RET 5
D RET 6
SHIFT
GND
D141
SL-1172C
D142
SL-1172C
D69,70,71
SLR-54DC3
D73
SLR-54VC3
D74
SLR-54MC3
D78
SLR-54YC3
D53,55
SLR-54MC3
D54,88
SLR-54VC3
D87,89
SLR-54MC3
D1-D43
1SS119
D101-D112
D114-D130
1SS119
S44
S45
P-PLAY
P-STILL
P-REW
P-FF
P-SHTL
P-JOG
P-DMC
R-PLAY
R-STILL
R-REW
R-FF
R-SHTL
R-JOG
R-DMC
MARK IN
MARK OUT
MARK SPLIT
REC/REC OFF
PREVIEW
ALL STOP
GO TO
ASMBL
CLEAR
LAST-X
TIME TRACK
MARK SPEED
OUT
EFF
SPLIT
TOTAL
DUR
REC
IN
A1
A2
P1
P2
R
PAT 1
PAT 2
PAT 3
PAT 4
PAT 5
PAT 6
PAT 7
PAT 8
PAT 9
PAT 10
A BUS P1
A BUS P2
A BUS AUX
A BUS BG
A BUS
B BUS P1
B BUS P2
B BUS AUX
B BUS BG
B BUS
TITLE
CUT
DISS
WIPE
MAN
VTR
X1 SEC
X0. SEC
A
B
C
D
E
F
G
H

KEY BOARD
BVE-600(1)


DET-3
SW-232
DET-3
SW-231
SY-113 (1/2)
DIN CONNECTOR (96P)
MB-163
DIN CONNECTOR (32P)
DIN CONNECTOR (64P)
IF-167
CN-249
POWER SUPPLY
RECORDER REMOTE (9P)
PLAYER 1 REMOTE (9P)
PLAYER 2 REMOTE (9P)
MIXER REMOTE (15P)
RS-232C REMOTE (25P)
CN101
CN203
CN204
CN2
CN205
CN1
CN104
CN105
CN108
CN106
CN107
CN116
CN218
CN216
CN217
CN201
CN202
CN301
CN302
CN303
CN601
CN502
CN504
CN505
CN501
CN3
CN4
CN5
CN6
CN7
CN8
CN9
CN10
CN11
CN12
CN13
CN14

FRAME(½)

BVE-600(I)


DP-77 (P1)
CN401
A SCAN 8 401-1
A OUT 4 401-2
A OUT 5 401-3
A OUT 3 401-4
D SCAN 1 401-5
D OUT 8 401-6
A OUT 2 401-7
A OUT 6 401-8
A OUT 1 401-9
A OUT 7 401-10
A SCAN 7 401-11
CN402
D RET 6 402-1
D OUT 6 402-2
D K-SCAN 1 402-3
A OUT 3 402-4
A SCAN 4 402-5
A SCAN 5 402-6
A SCAN 6 402-7
A SCAN 1 402-8
A SCAN 2 402-9
D OUT 7 402-10
DP-77 (P2)
CN401
B SCAN 8 401-1
B OUT 4 401-2
B OUT 5 401-3
B OUT 3 401-4
D SCAN 2 401-5
D OUT 8 401-6
B OUT 2 401-7
B OUT 6 401-8
B OUT 1 401-9
B OUT 7 401-10
B SCAN 7 401-11
CN402
D RET 6 402-1
D OUT 6 402-2
D K-SCAN 2 402-3
B SCAN 3 402-4
B SCAN 4 402-5
B SCAN 5 402-6
B SCAN 6 402-7
B SCAN 1 402-8
B SCAN 2 402-9
D OUT 7 402-10
DP-77 (R)
CN401
C SCAN 8 401-1
C OUT 4 401-2
C OUT 5 401-3
C OUT 3 401-4
D SCAN 3 401-5
—— 401-6
C OUT 2 401-7
C OUT 6 401-8
C OUT 1 401-9
C OUT 7 401-10
C SCAN 7 401-11
CN402
D RET 6 402-1
D OUT 6 402-2
D K-SCAN 3 402-3
C SCAN 3 402-4
C SCAN 4 402-5
C SCAN 5 402-6
C SCAN 6 402-7
C SCAN 1 402-8
C SCAN 2 402-9
—— 402-10
SY-113 (2/2)
CN109
109-1 A SCAN 8
109-2 A OUT 4
109-3 A OUT 5
109-4 A OUT 3
109-5 D SCAN 1
109-6 D OUT 8
109-7 A OUT 2
109-8 A OUT 6
109-9 A OUT 1
109-10 A OUT 7
109-11 A SCAN 7
CN110
110-1 D RET 6
110-2 D OUT 6
110-3 D K-SCAN 1
110-4 A OUT 3
110-5 A SCAN 4
110-6 A SCAN 5
110-7 A SCAN 6
110-8 A SCAN 1
110-9 A SCAN 2
110-10 D OUT 7
CN111
111-1 B SCAN 8
111-2 B OUT 4
111-3 B OUT 5
111-4 B OUT 3
111-5 D SCAN 2
111-6 D OUT 8
111-7 B OUT 2
111-8 B OUT 6
111-9 B OUT 1
111-10 B OUT 7
111-11 B SCAN 7
CN112
112-1 D RET 6
112-2 D OUT 6
112-3 D K-SCAN 2
112-4 B SCAN 3
112-5 B SCAN 4
112-6 B SCAN 5
112-7 B SCAN 6
112-8 B SCAN 1
112-9 B SCAN 2
112-10 D OUT 7
CN113
113-1 C SCAN 8
113-2 C OUT 4
113-3 C OUT 5
113-4 C OUT 3
113-5 D SCAN 3
113-6 ——
113-7 C OUT 2
113-8 C OUT 6
113-9 C OUT 1
113-10 C OUT 7
113-11 C SCAN 7
CN114
114-1 D RET 6
114-2 D OUT 6
114-3 D K-SCAN 3
114-4 C SCAN 3
114-5 C SCAN 4
114-6 C SCAN 5
114-7 C SCAN 6
114-8 C SCAN 1
114-9 C SCAN 2
114-10 ——
CN102
D OUT 1 102-1A
D OUT 2 102-2A
D OUT 3 102-3A
D OUT 4 102-4A
D OUT 5 102-5A
D OUT 6 102-6A
D OUT 7 102-7A
D OUT 8 102-8A
—— 102-9A
D RET 1 102-10A
D RET 2 102-11A
D RET 3 102-12A
D RET 4 102-13A
D RET 5 102-14A
D RET 6 102-15A
D RET 7 102-16A
D RET 8 102-17A
D SCAN 1 102-1B
D SCAN 2 102-2B
D SCAN 3 102-3B
D SCAN 4 102-4B
D SCAN 5 102-5B
D SCAN 6 102-6B
D SCAN 7 102-7B
D SCAN 8 102-8B
—— 102-9B
D K-SCAN 1 102-10B
D K-SCAN 2 102-11B
D K-SCAN 3 102-12B
D K-SCAN 4 102-13B
D K-SCAN 5 102-14B
D K-SCAN 6 102-15B
D K-SCAN 7 102-16B
D K-SCAN 8 102-17B
CN103
E OUT 1 103-1A
E OUT 2 103-2A
E OUT 3 103-3A
E OUT 4 103-4A
E OUT 5 103-5A
E OUT 6 103-6A
E OUT 7 103-7A
E OUT 8 103-8A
GND 103-9A
E RET 1 103-10A
E RET 2 103-11A
E RET 3 103-12A
E RET 4 103-13A
E RET 5 103-14A
E RET 6 103-15A
E RET 7 103-16A
E RET 8 103-17A
E SCAN 1 103-1B
E SCAN 2 103-2B
E SCAN 3 103-3B
E SCAN 4 103-4B
E SCAN 5 103-5B
E SCAN 6 103-6B
E SCAN 7 103-7B
E SCAN 8 103-8B
GND 103-9B
E K-SCAN 1 103-10B
E K-SCAN 2 103-11B
E K-SCAN 3 103-12B
E K-SCAN 4 103-13B
E K-SCAN 5 103-14B
E K-SCAN 6 103-15B
SHIFT 103-16B
—— 103-17B
FLAT CABLE (34P)
FLAT CABLE (34P)
KEY BOARD ASSY
CN1
1-1A D OUT 1
1-2A D OUT 2
1-3A D OUT 3
1-4A D OUT 4
1-5A D OUT 5
1-6A D OUT 6
1-7A D OUT 7
1-8A D OUT 8
1-9A ——
1-10A D RET 1
1-11A D RET 2
1-12A D RET 3
1-13A D RET 4
1-14A D RET 5
1-15A D RET 6
1-16A D RET 7
1-17A D RET 8
1-1B D SCAN 1
1-2B D SCAN 2
1-3B D SCAN 3
1-4B D SCAN 4
1-5B D SCAN 5
1-6B D SCAN 6
1-7B D SCAN 7
1-8B D SCAN 8
1-9B ——
1-10B D K-SCAN 1
1-11B D K-SCAN 2
1-12B D K-SCAN 3
1-13B D K-SCAN 4
1-14B D K-SCAN 5
1-15B D K-SCAN 6
1-16B D K-SCAN 7
1-17B D K-SCAN 8
CN2
2-1A E OUT 1
2-2A E OUT 2
2-3A E OUT 3
2-4A E OUT 4
2-5A E OUT 5
2-6A E OUT 6
2-7A E OUT 7
2-8A E OUT 8
2-9A GND
2-10A E RET 1
2-11A E RET 2
2-12A E RET 3
2-13A E RET 4
2-14A E RET 5
2-15A E RET 6
2-16A E RET 7
2-17A E RET 8
2-1B E SCAN 1
2-2B E SCAN 2
2-3B E SCAN 3
2-4B E SCAN 4
2-5B E SCAN 5
2-6B E SCAN 6
2-7B E SCAN 7
2-8B E SCAN 8
2-9B GND
2-10B E K-SCAN 1
2-11B E K-SCAN 2
2-12B E K-SCAN 3
2-13B E K-SCAN 4
2-14B E K-SCAN 5
2-15B E K-SCAN 6
2-16B SHIFT
2-17B ——
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FRAME(2/2)

BVE-600(1)

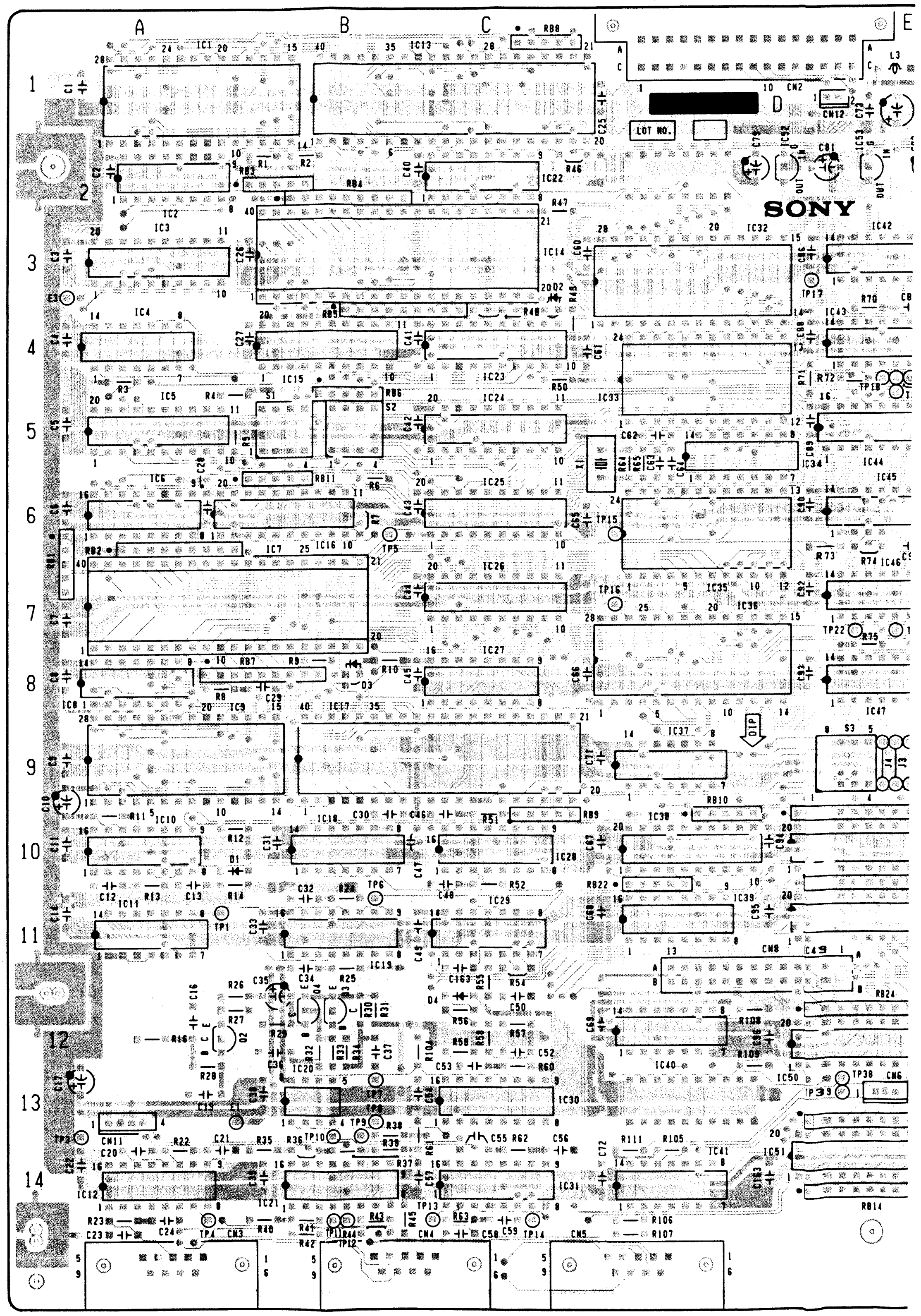
SECTION 8
PRINTED CIRCUIT BOARDS

IF-167 (1-627-387-11)

CN1	H-1	IC36	D-8	IC95	J-6	TP5	B-6
CN2	D-1	IC37	D-9	IC96	J-7	TP6	B-11
CN3	A-14	IC38	D-10	IC97	J-8	TP7	B-13
CN4	C-14	IC39	D-11	IC98	J-9	TP8	B-13
CN5	D-14	IC40	D-12	IC99	J-10	TP9	B-13
CN6	E-13	IC41	D-14	IC100	J-11	TP10	B-13
CN7	G-14	IC42	E-3	IC101	J-11	TP11	B-14
CN8	F-13	IC43	E-4	IC102	J-12	TP12	B-14
CN9	F-13	IC44	E-5			TP13	C-14
CN10	G-13	IC45	E-6	PS1	E-1	TP14	C-14
CN11	A-13	IC46	E-7	PS2	E-1	TP15	C-6
CN12	D-1	IC47	E-8	PS3	I-1	TP16	C-7
CN13	J-14	IC48	E-10			TP17	D-3
		IC49	E-11	Q2	A-12	TP18	E-4
D1	A-10	IC50	E-12	Q3	B-12	TP19	E-4
D2	C-3	IC51	E-13	Q4	B-12	TP20	E-4
D3	B-8	IC52	D-2			TP21	E-5
D4	C-12	IC53	E-2	RB1	A-6	TP22	E-7
		IC54	E-2	RB2	A-6	TP23	E-7
E1	A-13	IC55	F-3	RB3	B-2	TP24	E-5
E2	J-2	IC56	F-4	RB4	B-2	TP25	E-8
E3	A-3	IC57	F-5	RB5	B-4	TP26	G-14
E4	J-12	IC58	F-6	RB6	B-5	TP27	G-14
		IC59	F-7	RB7	B-8	TP28	G-14
IC1	A-1	IC60	F-8	RB8	C-1	TP29	G-14
IC2	A-2	IC61	F-9	RB9	C-10	TP30	J-10
IC3	A-3	IC62	F-10	RB10	D-10	TP31	H-10
IC4	A-4	IC63	F-11	RB11	B-5	TP32	H-11
IC5	A-5	IC64	F-12	RB12	J-10	TP33	H-11
IC6	A-6	IC65	F-12	RB13	E-13	TP34	J-11
IC7	A-7	IC66	F-14	RB14	F-14	TP35	J-11
IC8	A-8	IC67	G-2	RB15	G-1	TP36	J-11
IC9	A-9	IC68	G-3	RB16	G-13	TP37	J-12
IC10	A-10	IC69	G-4	RB17	G-14	TP38	E-12
IC11	A-11	IC70	G-5	RB18	H-1	TP39	E-13
IC12	A-14	IC71	G-6	RB19	H-5		
IC13	C-1	IC72	G-7	RB20	J-1	X1	C-5
IC14	B-3	IC73	G-8	RB21	J-5		
IC15	B-4	IC74	G-9	RB22	D-10		
IC16	B-6	IC75	G-10	RB23	E-10		
IC17	C-9	IC76	G-11	RB24	E-12		
IC18	B-10	IC77	G-12	RB25	F-13		
IC19	B-11	IC78	G-12	RB26	G-12		
IC20	B-13	IC79	G-14	RB27	E-10		
IC21	B-14	IC80	H-2				
IC22	C-2	IC81	H-3	RV1	H-10		
IC23	C-4	IC82	H-4	RV2	H-11		
IC24	C-5	IC83	H-5	RV3	H-11		
IC25	C-6	IC84	H-6	RV4	H-11		
IC26	C-7	IC85	H-7				
IC27	C-8	IC86	H-8	S1	B-5		
IC28	C-10	IC87	H-9	S2	B-5		
IC29	C-11	IC88	H-10	S3	E-9		
IC30	C-13	IC89	H-12	S4	J-11		
IC31	C-14	IC90	H-14	S5	J-10		
IC32	D-3	IC91	J-2				
IC33	D-4	IC92	J-3	TP1	A-11		
IC34	D-5	IC93	J-4	TP3	A-13		
IC35	D-6	IC94	J-5	TP4	A-14		

IF-167; VTR/MIXER INTERFACE

S/N UP TO 10210(UC)
S/N UP TO 10135(J)
S/N UP TO 10160(EK)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SONY
LOT NO.
IC1
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IC47
IC50
CN2
CN3
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CN6
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CN11
CN12
S1
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S3
X1
TP1
TP3
TP4
TP5
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TP9
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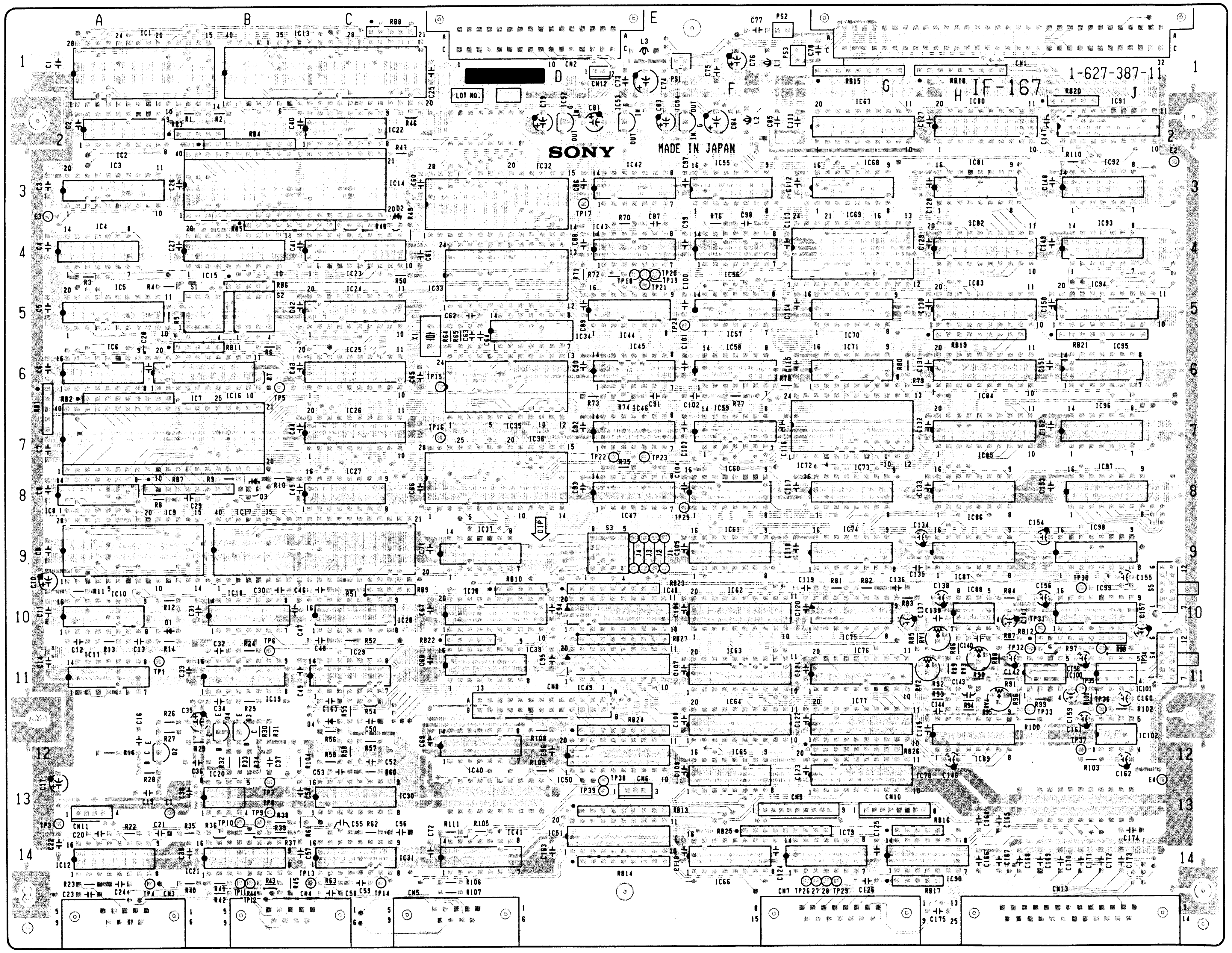
TP38
TP39

IF-167; VTR/MIXER INTERFACE

S/N UP TO 10210(UC)
S/N UP TO 10135(J)
S/N UP TO 10160(EK)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1-627-387-11
IF-167
SONY
MADE IN JAPAN
LOT NO.
CN1
CN2
CN3
CN4
CN5
CN7
CN13
IC1
IC13
IC14
IC32
IC40
IC67
IC80
IC91

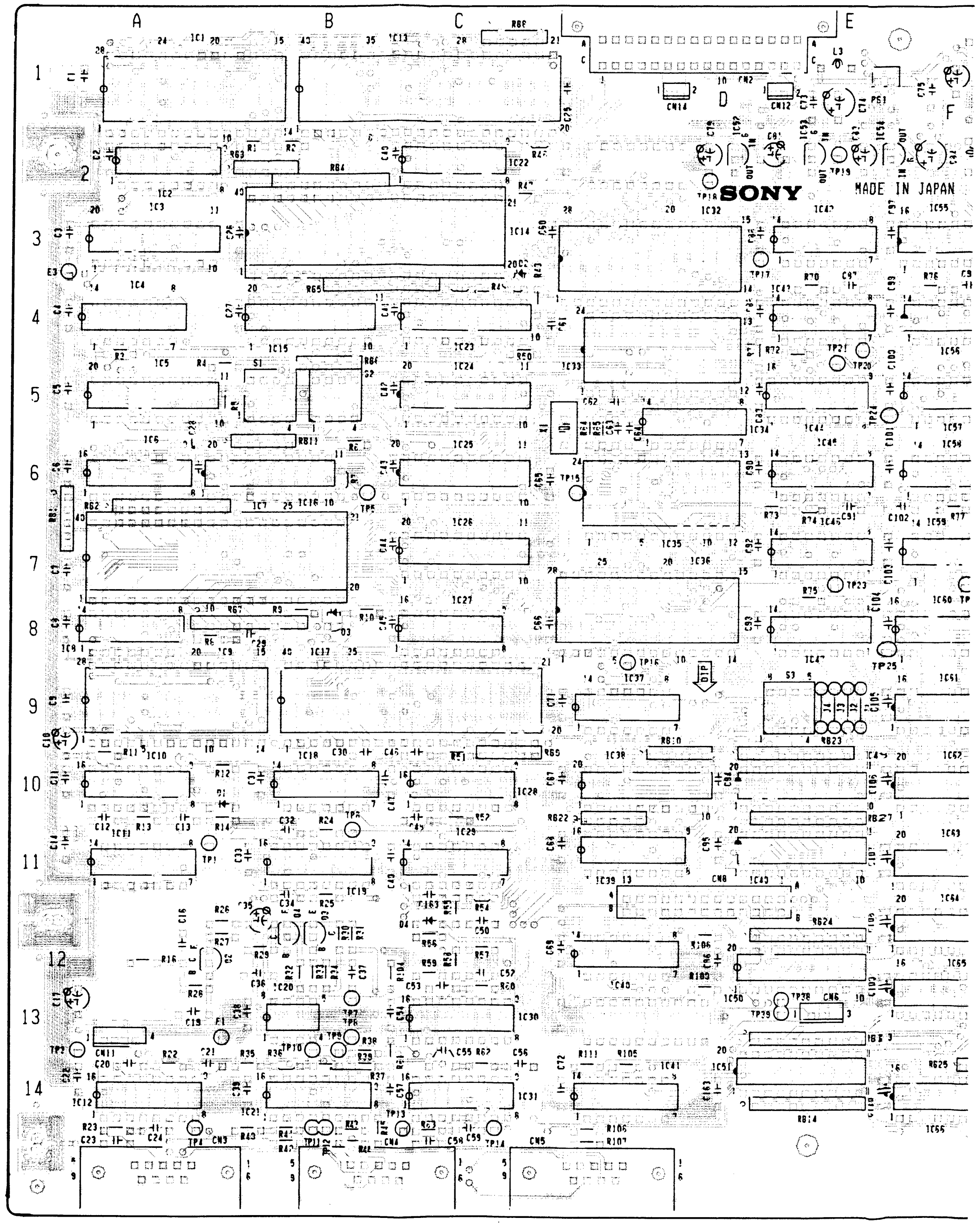
IF-167 —COMPONENT SIDE—
1-627-387-11(1)
BVE-600

IF-167; VTR/MIXER INTERFACE

S/N 10211 TO 10597(UC)
S/N 10136 TO 10475(J)
S/N 10161 TO 11000(EK)

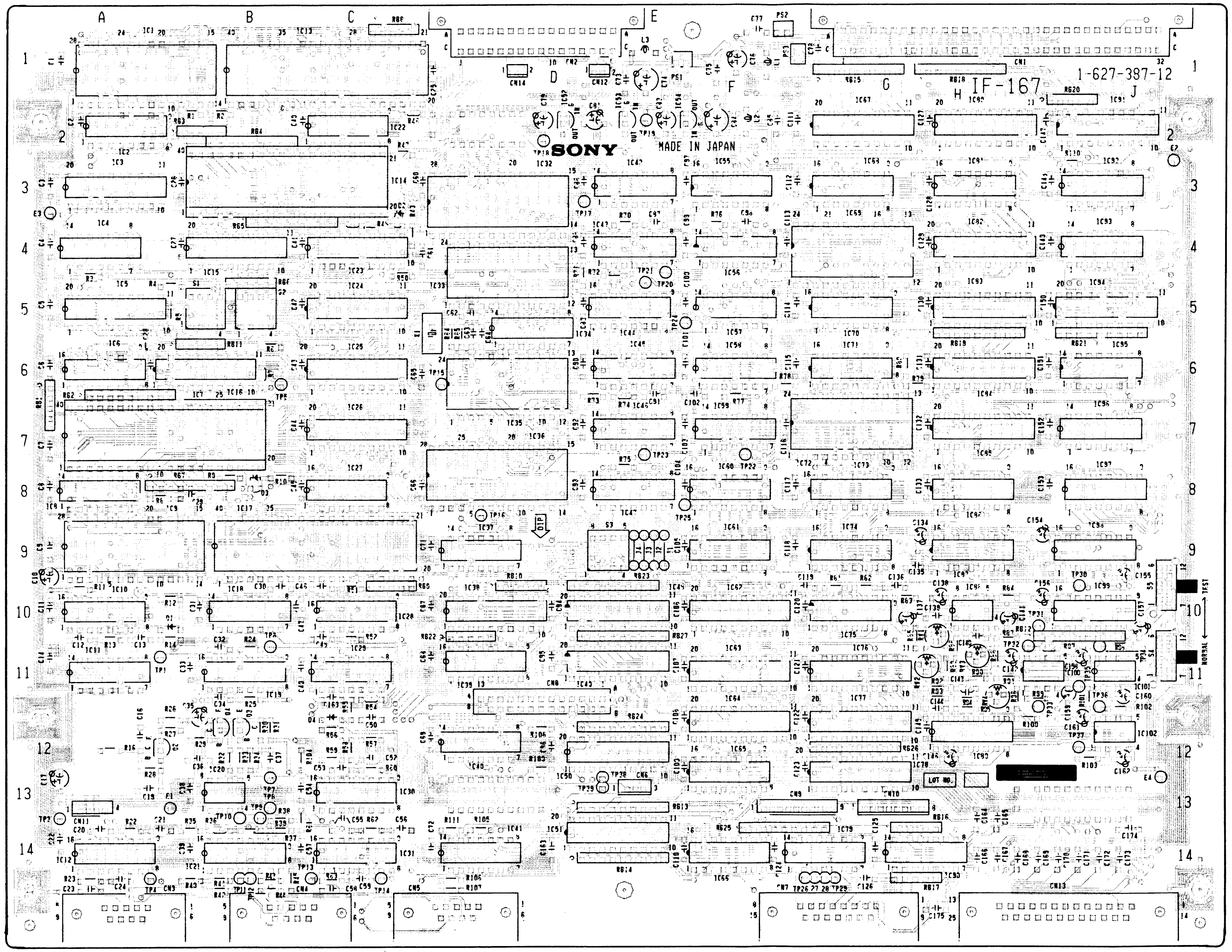
IF-167 (1-627-387-12)

CN1	H-1	IC36	D-8	IC95	J-6	TP5	B-6
CN2	D-1	IC37	D-9	IC96	J-7	TP6	B-11
CN3	A-14	IC38	D-10	IC97	J-8	TP7	B-13
CN4	C-14	IC39	D-11	IC98	J-9	TP8	B-13
CN5	D-14	IC40	D-12	IC99	J-10	TP9	B-13
CN6	E-13	IC41	D-14	IC100	J-11	TP10	B-13
CN7	G-14	IC42	E-3	IC101	J-11	TP11	B-14
CN8	F-13	IC43	E-4	IC102	J-12	TP12	B-14
CN9	F-13	IC44	E-5			TP13	C-14
CN10	G-13	IC45	E-6	PS1	E-1	TP14	C-14
CN11	A-13	IC46	E-7	PS2	E-1	TP15	C-6
CN12	D-1	IC47	E-8	PS3	I-1	TP16	C-7
CN13	J-14	IC48	E-10			TP17	D-3
		IC49	E-11	Q2	A-12	TP18	E-4
D1	A-10	IC50	E-12	Q3	B-12	TP19	E-4
D2	C-3	IC51	E-13	Q4	B-12	TP20	E-4
D3	B-8	IC52	D-2			TP21	E-5
D4	C-12	IC53	E-2	RB1	A-6	TP22	E-7
		IC54	E-2	RB2	A-6	TP23	E-7
E1	A-13	IC55	F-3	RB3	B-2	TP24	E-5
E2	J-2	IC56	F-4	RB4	B-2	TP25	E-8
E3	A-3	IC57	F-5	RB5	B-4	TP26	G-14
E4	J-12	IC58	F-6	RB6	B-5	TP27	G-14
		IC59	F-7	RB7	B-8	TP28	G-14
IC1	A-1	IC60	F-8	RB8	C-1	TP29	G-14
IC2	A-2	IC61	F-9	RB9	C-10	TP30	J-10
IC3	A-3	IC62	F-10	RB10	D-10	TP31	H-10
IC4	A-4	IC63	F-11	RB11	B-5	TP32	H-11
IC5	A-5	IC64	F-12	RB12	J-10	TP33	H-11
IC6	A-6	IC65	F-12	RB13	E-13	TP34	J-11
IC7	A-7	IC66	F-14	RB14	F-14	TP35	J-11
IC8	A-8	IC67	G-2	RB15	G-1	TP36	J-11
IC9	A-9	IC68	G-3	RB16	G-13	TP37	J-12
IC10	A-10	IC69	G-4	RB17	G-14	TP38	E-12
IC11	A-11	IC70	G-5	RB18	H-1	TP39	E-13
IC12	A-14	IC71	G-6	RB19	H-5		
IC13	C-1	IC72	G-7	RB20	J-1	X1	C-5
IC14	B-3	IC73	G-8	RB21	J-5		
IC15	B-4	IC74	G-9	RB22	D-10		
IC16	B-6	IC75	G-10	RB23	E-10		
IC17	C-9	IC76	G-11	RB24	E-12		
IC18	B-10	IC77	G-12	RB25	F-13		
IC19	B-11	IC78	G-12	RB26	G-12		
IC20	B-13	IC79	G-14	RB27	E-10		
IC21	B-14	IC80	H-2				
IC22	C-2	IC81	H-3	RV1	H-10		
IC23	C-4	IC82	H-4	RV2	H-11		
IC24	C-5	IC83	H-5	RV3	H-11		
IC25	C-6	IC84	H-6	RV4	H-11		
IC26	C-7	IC85	H-7				
IC27	C-8	IC86	H-8	S1	B-5		
IC28	C-10	IC87	H-9	S2	B-5		
IC29	C-11	IC88	H-10	S3	E-9		
IC30	C-13	IC89	H-12	S4	J-11		
IC31	C-14	IC90	H-14	S5	J-10		
IC32	D-3	IC91	J-2				
IC33	D-4	IC92	J-3	TP1	A-11		
IC34	D-5	IC93	J-4	TP3	A-13		
IC35	D-6	IC94	J-5	TP4	A-14		



IF-167; VTR/MIXER INTERFACE

S/N 10211 TO 10597(UC)
S/N 10136 TO 10475(J)
S/N 10161 TO 11000(EK)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IF-167
1-627-387-12
SONY
MADE IN JAPAN
CN1
TEST
NORMAL
LOT NO.

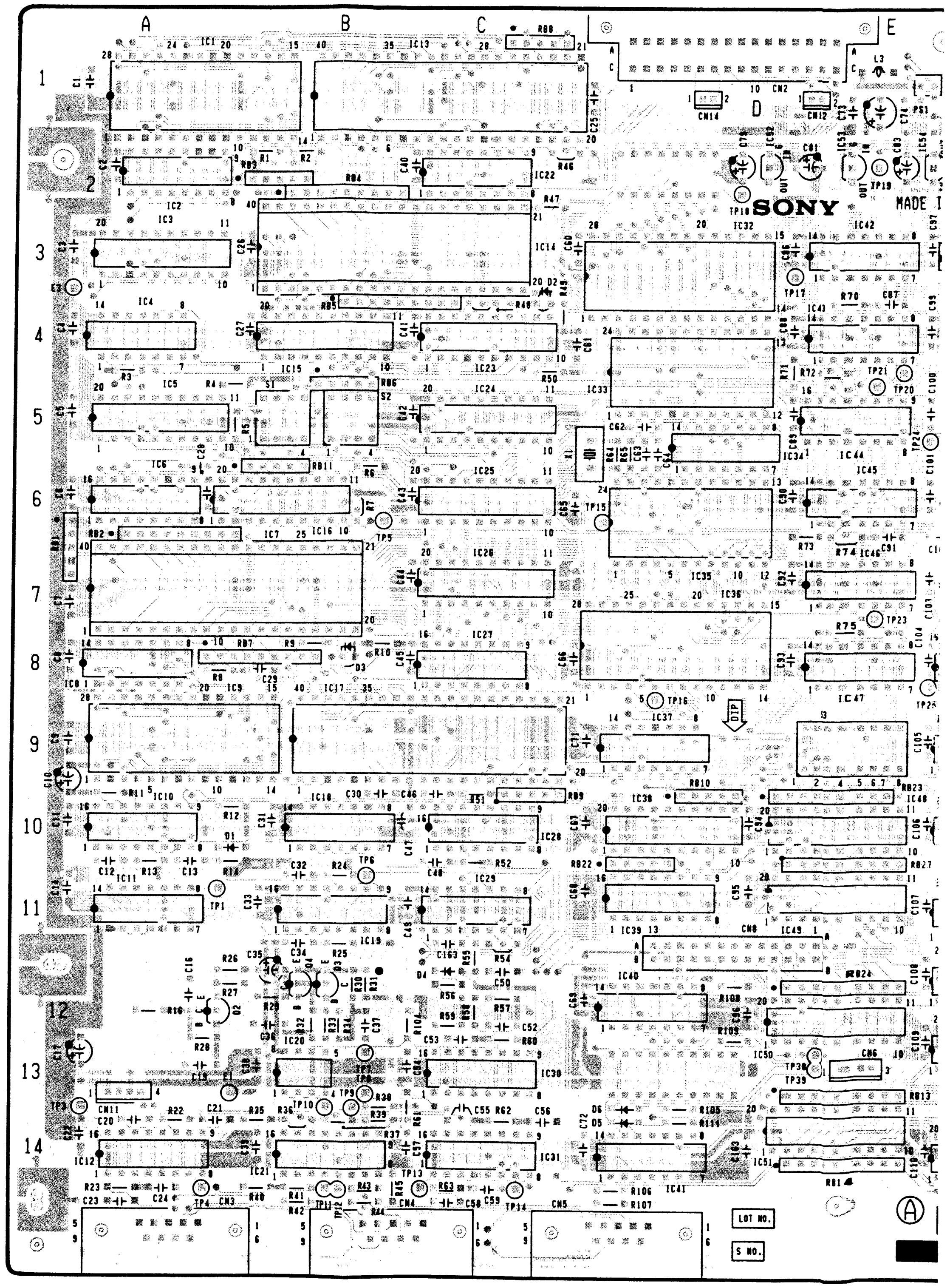
IF-167 —COMPONENT SIDE—
1-627-387-12(1)
BVE-600

IF-167; VTR/MIXER INTERFACE

S/N 20001 AND HIGHER(UC)
S/N 20001 AND HIGHER(J)
S/N 20001 AND HIGHER(EK)

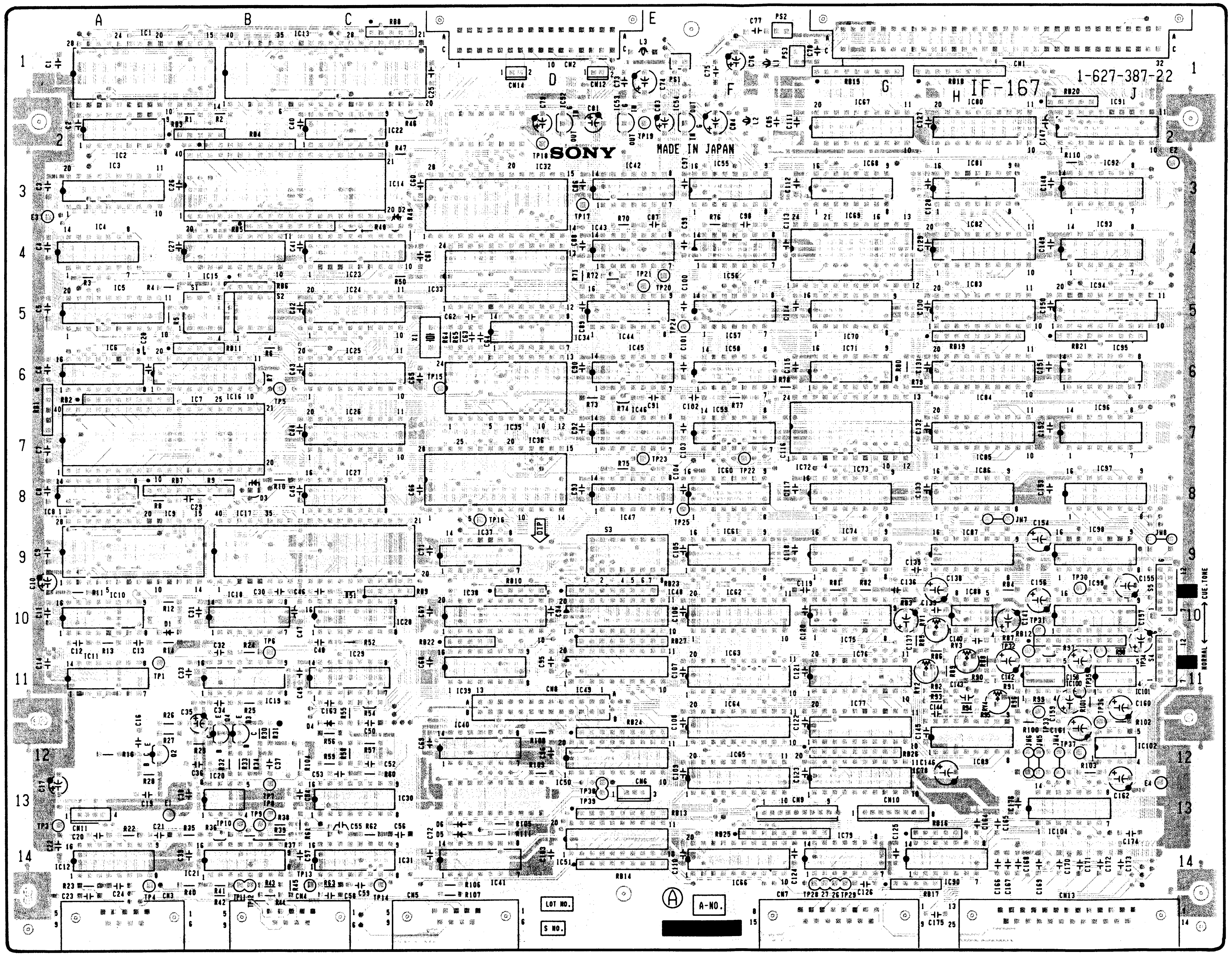
IF-167 (1-627-387-22)

CN1	H-1	IC34	D-5	IC93	J-4	TP3	A-13
CN2	D-1	IC35	D-6	IC94	J-5	TP4	A-14
CN3	A-14	IC36	D-8	IC95	J-6	TP5	B-6
CN4	C-14	IC37	D-9	IC96	J-7	TP6	B-11
CN5	D-14	IC38	D-10	IC97	J-8	TP7	B-13
CN6	E-13	IC39	D-11	IC98	J-9	TP8	B-13
CN7	G-14	IC40	D-12	IC99	J-10	TP9	B-13
CN8	F-13	IC41	D-14	IC100	J-11	TP10	B-13
CN9	F-13	IC42	E-3	IC101	J-11	TP11	B-14
CN10	G-13	IC43	E-4	IC102	J-12	TP12	B-14
CN11	A-13	IC44	E-5			TP13	C-14
CN12	D-1	IC45	E-6	PS1	E-1	TP14	C-14
CN13	J-14	IC46	E-7	PS2	E-1	TP15	C-6
		IC47	E-8	PS3	I-1	TP16	C-7
D1	A-10	IC48	E-10			TP17	D-3
D2	C-3	IC49	E-11	Q2	A-12	TP18	E-4
D3	B-8	IC50	E-12	Q3	B-12	TP19	E-4
D4	C-12	IC51	E-13	Q4	B-12	TP20	E-4
D5	D-13	IC52	D-2			TP21	E-5
D6	D-13	IC53	E-2	RB1	A-6	TP22	E-7
		IC54	E-2	RB2	A-6	TP23	E-7
E1	A-13	IC55	F-3	RB3	B-2	TP24	E-5
E2	J-2	IC56	F-4	RB4	B-2	TP25	E-8
E3	A-3	IC57	F-5	RB5	B-4	TP26	G-14
E4	J-12	IC58	F-6	RB6	B-5	TP27	G-14
		IC59	F-7	RB7	B-8	TP28	G-14
IC1	A-1	IC60	F-8	RB8	C-1	TP29	G-14
IC2	A-2	IC61	F-9	RB9	C-10	TP30	J-10
IC3	A-3	IC62	F-10	RB10	D-10	TP31	H-10
IC4	A-4	IC63	F-11	RB11	B-5	TP32	H-11
IC5	A-5	IC64	F-12	RB12	J-10	TP33	H-11
IC6	A-6	IC65	F-12	RB13	E-13	TP34	J-11
IC7	A-7	IC66	F-14	RB14	F-14	TP35	J-11
IC8	A-8	IC67	G-2	RB15	G-1	TP36	J-11
IC9	A-9	IC68	G-3	RB16	G-13	TP37	J-12
IC10	A-10	IC69	G-4	RB17	G-14	TP38	E-12
IC11	A-11	IC70	G-5	RB18	H-1	TP39	E-13
IC12	A-14	IC71	G-6	RB19	H-5		
IC13	C-1	IC72	G-7	RB20	J-1	X1	C-5
IC14	B-3	IC73	G-8	RB21	J-5		
IC15	B-4	IC74	G-9	RB22	D-10		
IC16	B-6	IC75	G-10	RB23	E-10		
IC17	C-9	IC76	G-11	RB24	E-12		
IC18	B-10	IC77	G-12	RB25	F-13		
IC19	B-11	IC78	G-12	RB26	G-12		
IC20	B-13	IC79	G-14	RB27	E-10		
IC21	B-14	IC80	H-2				
IC22	C-2	IC81	H-3	RV1	H-10		
IC23	C-4	IC82	H-4	RV2	H-11		
IC24	C-5	IC83	H-5	RV3	H-11		
IC25	C-6	IC84	H-6	RV4	H-11		
IC26	C-7	IC85	H-7				
IC27	C-8	IC86	H-8	S1	B-5		
IC28	C-10	IC87	H-9	S2	B-5		
IC29	C-11	IC88	H-10	S3	E-9		
IC30	C-13	IC89	H-12	S4	J-11		
IC31	C-14	IC90	H-14	S5	J-10		
IC32	D-3	IC91	J-2				
IC33	D-4	IC92	J-3	TP1	A-11		



IF-167; VTR/MIXER INTERFACE

S/N 20001 AND HIGHER(UC)
S/N 20001 AND HIGHER(J)
S/N 20001 AND HIGHER(EK)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SONY
MADE IN JAPAN
IF-167
1-627-387-22
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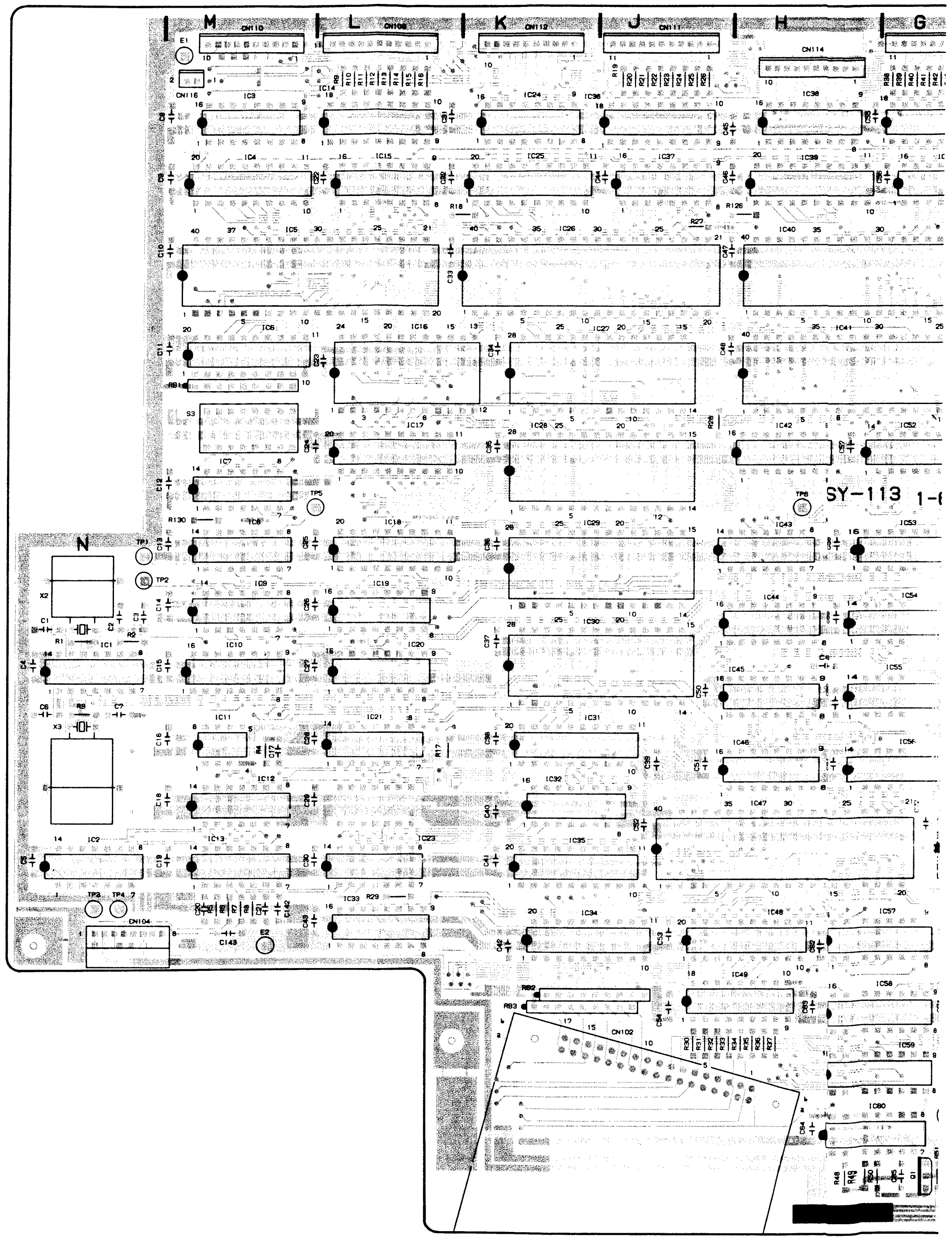
IF-167 —COMPONENT SIDE—
1-627-387-22(1)
BVE-600

SY-113; SYSTEM CONTROL

S/N UP TO 10210(UC)
S/N UP TO 10135(J)
S/N UP TO 10160(EK)

SY-113 (1-627-386-11)

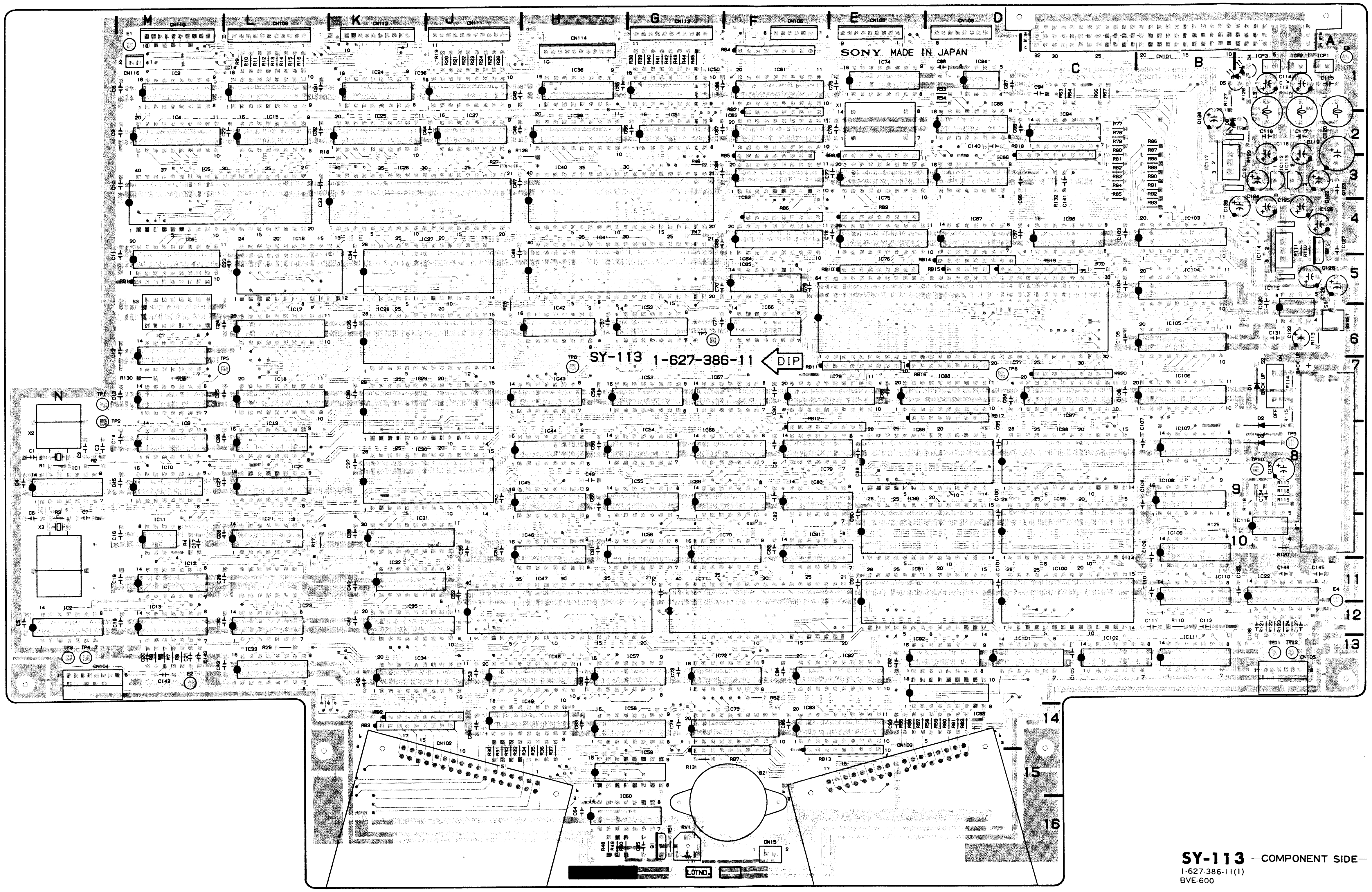
BT1	A-7	IC32	K-11	IC91	E-11	RV1	G-16
		IC33	L-13	IC92	D-13		
CN15	F-16	IC34	K-13	IC93	D-13	S1	A-6
CN101	B-1	IC35	K-12	IC94	C-2	S2	A-7
CN102	K-15	IC36	J-1	IC96	C-4	S3	M-5
CN103	E-15	IC37	J-2	IC97	C-7		
CN104	N-13	IC38	H-2	IC98	C-8	TP1	N-7
CN105	A-13	IC39	H-1	IC99	C-10	TP2	N-7
CN106	F-1	IC40	H-3	IC100	C-11	TP3	N-13
CN107	E-1	IC41	H-5	IC101	C-13	TP4	N-13
CN108	D-1	IC42	H-6	IC102	C-13	TP5	M-6
CN109	L-1	IC43	H-7	IC103	B-4	TP6	H-7
CN110	M-1	IC44	H-8	IC104	B-5	TP7	G-6
CN111	J-1	IC45	H-9	IC105	B-6	TP8	D-7
CN112	K-1	IC46	H-10	IC106	B-7	TP9	A-8
CN113	G-1	IC47	H-11	IC107	B-8	TP10	A-8
CN114	H-1	IC48	H-13	IC108	B-9	TP11	A-13
CN116	M-1	IC49	H-14	IC109	B-10	TP12	A-13
		IC50	G-1	IC110	B-11		
D1	A-7	IC51	G-2	IC111	B-13	X1	E-2
D2	A-8	IC52	G-6	IC112	A-3	X2	N-8
D3	A-8	IC53	G-7	IC113	A-3	X3	N-10
		IC54	G-8	IC114	A-4		
E1	M-1	IC55	G-9	IC115	A-6		
E2	M-13	IC56	G-10	IC116	A-10		
E3	A-1	IC57	G-13	IC117	B-3		
E4	A-11	IC58	G-14				
		IC59	G-15	PS1	A-1		
IC1	N-9	IC60	G-16	(ICP1)			
IC2	N-12	IC61	F-1	PS2	A-1		
IC3	M-1	IC62	F-2	(ICP2)			
IC4	M-2	IC63	F-3	PS3	A-1		
IC5	L-3	IC64	F-4	(ICP3)			
IC6	M-4	IC65	F-5				
IC7	M-6	IC66	F-6	Q1	G-16		
IC8	M-7	IC67	F-7	Q2	A-14		
IC9	M-8	IC68	F-8				
IC10	M-9	IC69	F-9	RB1	M-5		
IC11	M-10	IC70	F-10	RB2	K-14		
IC12	M-11	IC71	F-11	RB3	K-14		
IC13	M-12	IC72	F-13	RB4	F-1		
IC14	L-1	IC73	F-14	RB5	F-2		
IC15	L-2	IC74	E-1	RB6	F-4		
IC16	L-5	IC75	E-3	RB7	F-15		
IC17	L-6	IC76	E-4	RB8	E-2		
IC18	L-7	IC77	D-6	RB9	E-4		
IC19	L-8	IC78	E-7	RB10	E-5		
IC20	L-9	IC79	F-8	RB11	E-7		
IC21	L-10	IC80	F-9	RB12	F-7		
IC22	A-11	IC81	F-10	RB13	E-15		
IC23	L-12	IC82	E-13	RB14	D-5		
IC24	K-1	IC83	E-14	RB15	D-5		
IC25	K-2	IC84	D-1	RB16	D-7		
IC26	K-3	IC85	D-2	RB17	D-7		
IC27	J-5	IC86	D-3	RB18	C-2		
IC28	J-6	IC87	D-4	RB19	C-5		
IC29	J-7	IC88	D-7	RB20	C-7		
IC30	J-8	IC89	E-8	RB21	F-1		
IC31	K-10	IC90	E-10				



NOTE; D4, D5 and D6 are not mounted.

SY-113; SYSTEM CONTROL

S/N UP TO 10210(UC)
S/N UP TO 10135(J)
S/N UP TO 10160(EK)


M
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16
SONY MADE IN JAPAN
SY-113 1-627-386-11
DIP
LOTNO.

SY-113 —COMPONENT SIDE—
1-627-386-11(1)
BVE-600

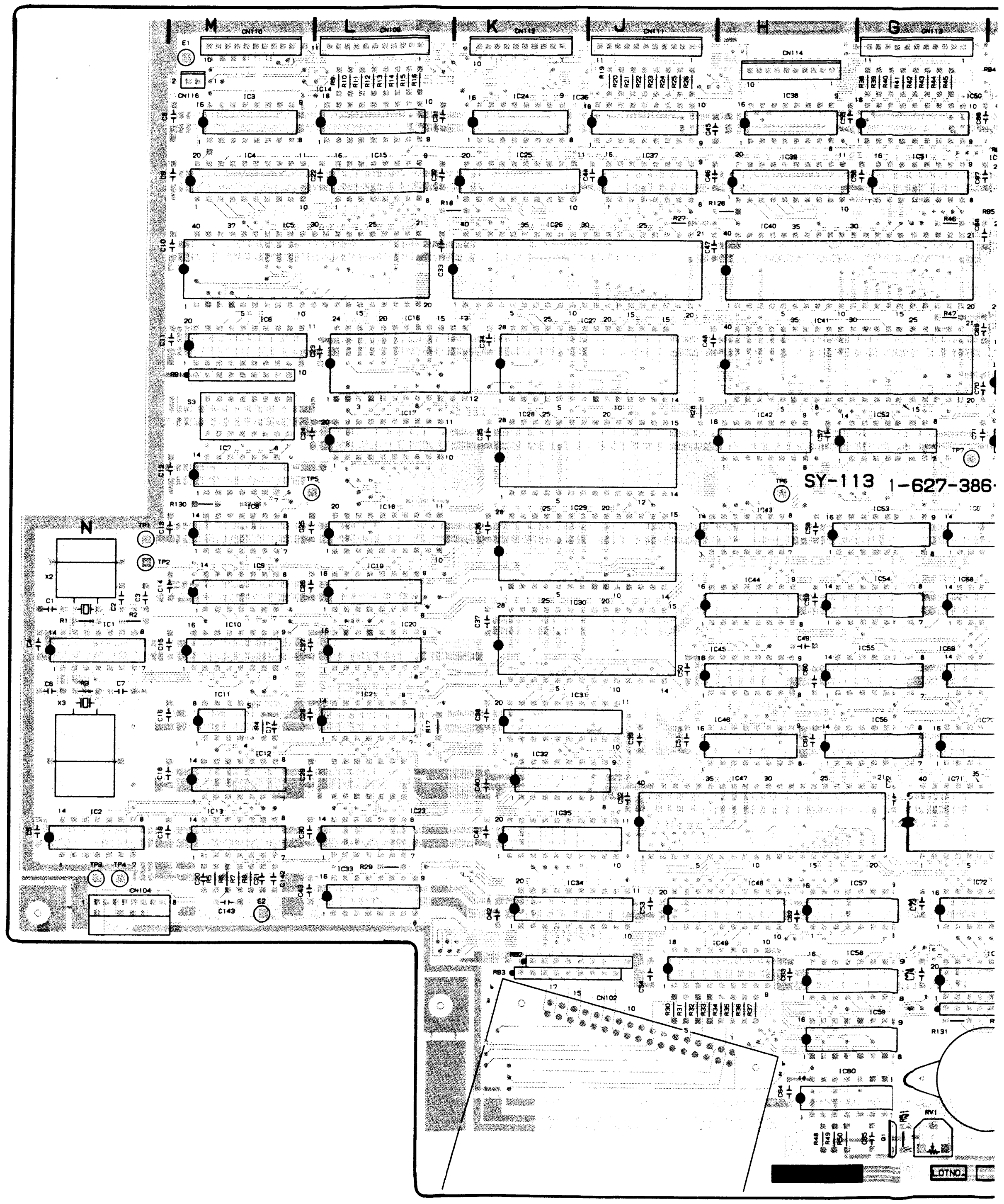
NOTE; D4, D5 and D6 are not mounted.

SY-113; SYSTEM CONTROL

S/N 10211 TO 10597(UC)
S/N 10136 TO 10475(J)
S/N 10161 TO 11000(EK)

SY-113 (1-627-386-12)

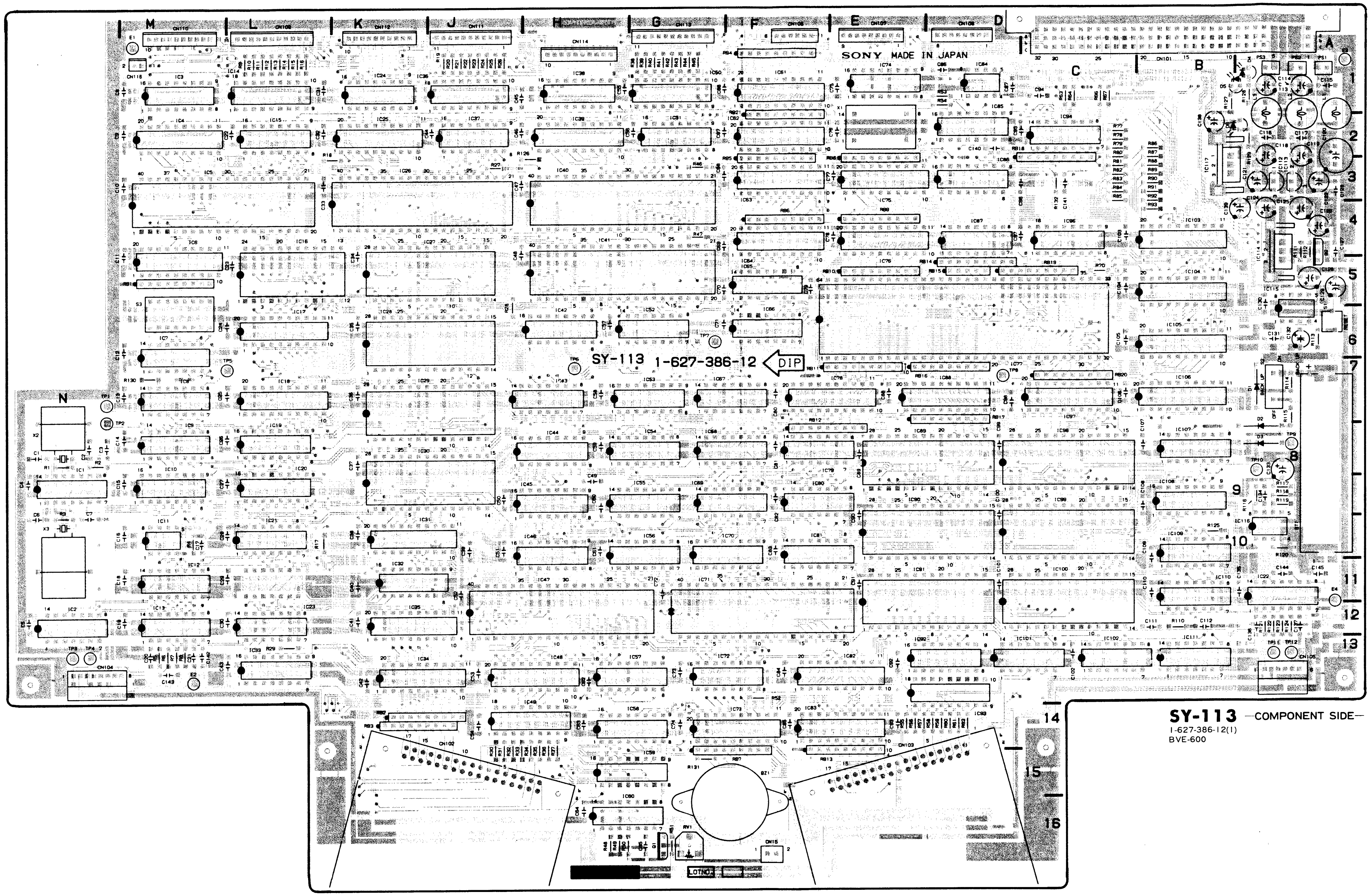
BT1	A-7
CN15	F-16
CN101	B-1
CN102	K-15
CN103	E-15
CN104	N-13
CN105	A-13
CN106	F-1
CN107	E-1
CN108	D-1
CN109	L-1
CN110	M-1
CN111	J-1
CN112	K-1
CN113	G-1
CN114	H-1
CN116	M-1
D1	A-7
D2	A-8
D3	A-8
E1	M-1
E2	M-13
E3	A-1
E4	A-11
IC1	N-9
IC2	N-12
IC3	M-1
IC4	M-2
IC5	L-3
IC6	M-4
IC7	M-6
IC8	M-7
IC9	M-8
IC10	M-9
IC11	M-10
IC12	M-11
IC13	M-12
IC14	L-1
IC15	L-2
IC16	L-5
IC17	L-6
IC18	L-7
IC19	L-8
IC20	L-9
IC21	L-10
IC22	A-11
IC23	L-12
IC24	K-1
IC25	K-2
IC26	K-3
IC27	J-5
IC28	J-6
IC29	J-7
IC30	J-8
IC31	K-10
IC32	K-11
IC33	L-13
IC34	K-13
IC35	K-12
IC36	J-1
IC37	J-2
IC38	H-2
IC39	H-1
IC40	H-3
IC41	H-5
IC42	H-6
IC43	H-7
IC44	H-8
IC45	H-9
IC46	H-10
IC47	H-11
IC48	H-13
IC49	H-14
IC50	G-1
IC51	G-2
IC52	G-6
IC53	G-7
IC54	G-8
IC55	G-9
IC56	G-10
IC57	G-13
IC58	G-14
IC59	G-15
IC60	G-16
IC61	F-1
IC62	F-2
IC63	F-3
IC64	F-4
IC65	F-5
IC66	F-6
IC67	F-7
IC68	F-8
IC69	F-9
IC70	F-10
IC71	F-11
IC72	F-13
IC73	F-14
IC74	E-1
IC75	E-3
IC76	E-4
IC77	D-6
IC78	E-7
IC79	F-8
IC80	F-9
IC81	F-10
IC82	E-13
IC83	E-14
IC84	D-1
IC85	D-2
IC86	D-3
IC87	D-4
IC88	D-7
IC89	E-8
IC90	E-10
IC91	E-11
IC92	D-13
IC93	D-13
IC94	C-2
IC96	C-4
IC97	C-7
IC98	C-8
IC99	C-10
IC100	C-11
IC101	C-13
IC102	C-13
IC103	B-4
IC104	B-5
IC105	B-6
IC106	B-7
IC107	B-8
IC108	B-9
IC109	B-10
IC110	B-11
IC111	B-13
IC112	A-3
IC113	A-3
IC114	A-4
IC115	A-6
IC116	A-10
IC117	B-3
PS1 (ICP1)	A-1
PS2 (ICP2)	A-1
PS3 (ICP3)	A-1
Q1	G-16
Q2	A-14
RB1	M-5
RB2	K-14
RB3	K-14
RB4	F-1
RB5	F-2
RB6	F-4
RB7	F-15
RB8	E-2
RB9	E-4
RB10	E-5
RB11	E-7
RB12	F-7
RB13	E-15
RB14	D-5
RB15	D-5
RB16	D-7
RB17	D-7
RB18	C-2
RB19	C-5
RB20	C-7
RB21	F-1
RV1	G-16
S1	A-6
S2	A-7
S3	M-5
TP1	N-7
TP2	N-7
TP3	N-13
TP4	N-13
TP5	M-6
TP6	H-7
TP7	G-6
TP8	D-7
TP9	A-8
TP10	A-8
TP11	A-13
TP12	A-13
X1	E-2
X2	N-8
X3	N-10



NOTE; D4, D5 and D6 are not mounted.

SY-113; SYSTEM CONTROL

S/N 10211 TO 10597(UC)
S/N 10136 TO 10475(J)
S/N 10161 TO 11000(EK)


M
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16
SONY MADE IN JAPAN
SY-113 1-627-386-12
DIP
LOT NO.

SY-113 —COMPONENT SIDE—
1-627-386-12(1)
BVE-600

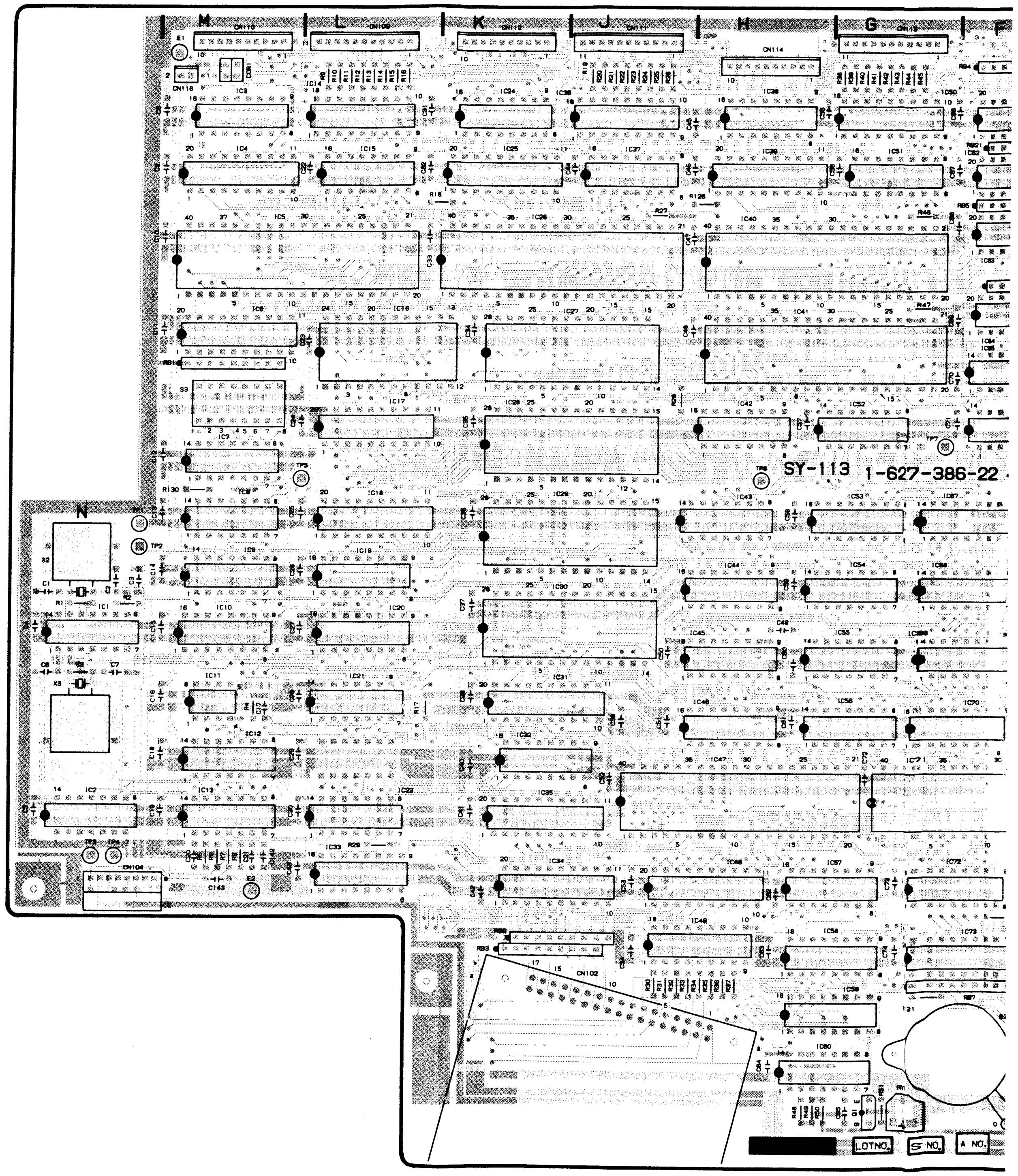
NOTE; D4, D5 and D6 are not mounted.

SY-113 (1-627-386-22)

BT1	A-7
CN15	F-16
CN101	B-1
CN102	K-15
CN103	E-15
CN104	N-13
CN105	A-13
CN106	F-1
CN107	E-1
CN108	D-1
CN109	L-1
CN110	M-1
CN111	J-1
CN112	K-1
CN113	G-1
CN114	H-1
CN116	M-1
D1	A-7
D2	A-8
D3	A-8
E1	M-1
E2	M-13
E3	A-1
E4	A-11
IC1	N-9
IC2	N-12
IC3	M-1
IC4	M-2
IC5	L-3
IC6	M-4
IC7	M-6
IC8	M-7
IC9	M-8
IC10	M-9
IC11	M-10
IC12	M-11
IC13	M-12
IC14	L-1
IC15	L-2
IC16	L-5
IC17	L-6
IC18	L-7
IC19	L-8
IC20	L-9
IC21	L-10
IC22	A-11
IC23	L-12
IC24	K-1
IC25	K-2
IC26	K-3
IC27	J-5
IC28	J-6
IC29	J-7
IC30	J-8
IC31	K-10
IC32	K-11
IC33	L-13
IC34	K-13
IC35	K-12
IC36	J-1
IC37	J-2
IC38	H-2
IC39	H-1
IC40	H-3
IC41	H-5
IC42	H-6
IC43	H-7
IC44	H-8
IC45	H-9
IC46	H-10
IC47	H-11
IC48	H-13
IC49	H-14
IC50	G-1
IC51	G-2
IC52	G-6
IC53	G-7
IC54	G-8
IC55	G-9
IC56	G-10
IC57	G-13
IC58	G-14
IC59	G-15
IC60	G-16
IC61	F-1
IC62	F-2
IC63	F-3
IC64	F-4
IC65	F-5
IC66	F-6
IC67	F-7
IC68	F-8
IC69	F-9
IC70	F-10
IC71	F-11
IC72	F-13
IC73	F-14
IC74	E-1
IC75	E-3
IC76	E-4
IC77	D-6
IC78	E-7
IC79	F-8
IC80	F-9
IC81	F-10
IC82	E-13
IC83	E-14
IC84	D-1
IC85	D-2
IC86	D-3
IC87	D-4
IC88	D-7
IC89	E-8
IC90	E-10
IC91	E-11
IC92	D-13
IC93	D-13
IC94	C-2
IC96	C-4
IC97	C-7
IC98	C-8
IC99	C-10
IC100	C-11
IC101	C-13
IC102	C-13
IC103	B-4
IC104	B-5
IC105	B-6
IC106	B-7
IC107	B-8
IC108	B-9
IC109	B-10
IC110	B-11
IC111	B-13
IC112	A-3
IC113	A-3
IC114	A-4
IC115	A-6
IC116	A-10
IC117	B-3
PS1 (ICP1)	A-1
PS2 (ICP2)	A-1
PS3 (ICP3)	A-1
Q1	G-16
Q2	A-14
RB1	M-5
RB2	K-14
RB3	K-14
RB4	F-1
RB5	F-2
RB6	F-4
RB7	F-15
RB8	E-2
RB9	E-4
RB10	E-5
RB11	E-7
RB12	F-7
RB13	E-15
RB14	D-5
RB15	D-5
RB16	D-7
RB17	D-7
RB18	C-2
RB19	C-5
RB20	C-7
RB21	F-1
RV1	G-16
S1	A-6
S2	A-7
S3	M-5
TP1	N-7
TP2	N-7
TP3	N-13
TP4	N-13
TP5	M-6
TP6	H-7
TP7	G-6
TP8	D-7
TP9	A-8
TP10	A-8
TP11	A-13
TP12	A-13
X1	E-2
X2	N-8
X3	N-10

SY-113; SYSTEM CONTROL

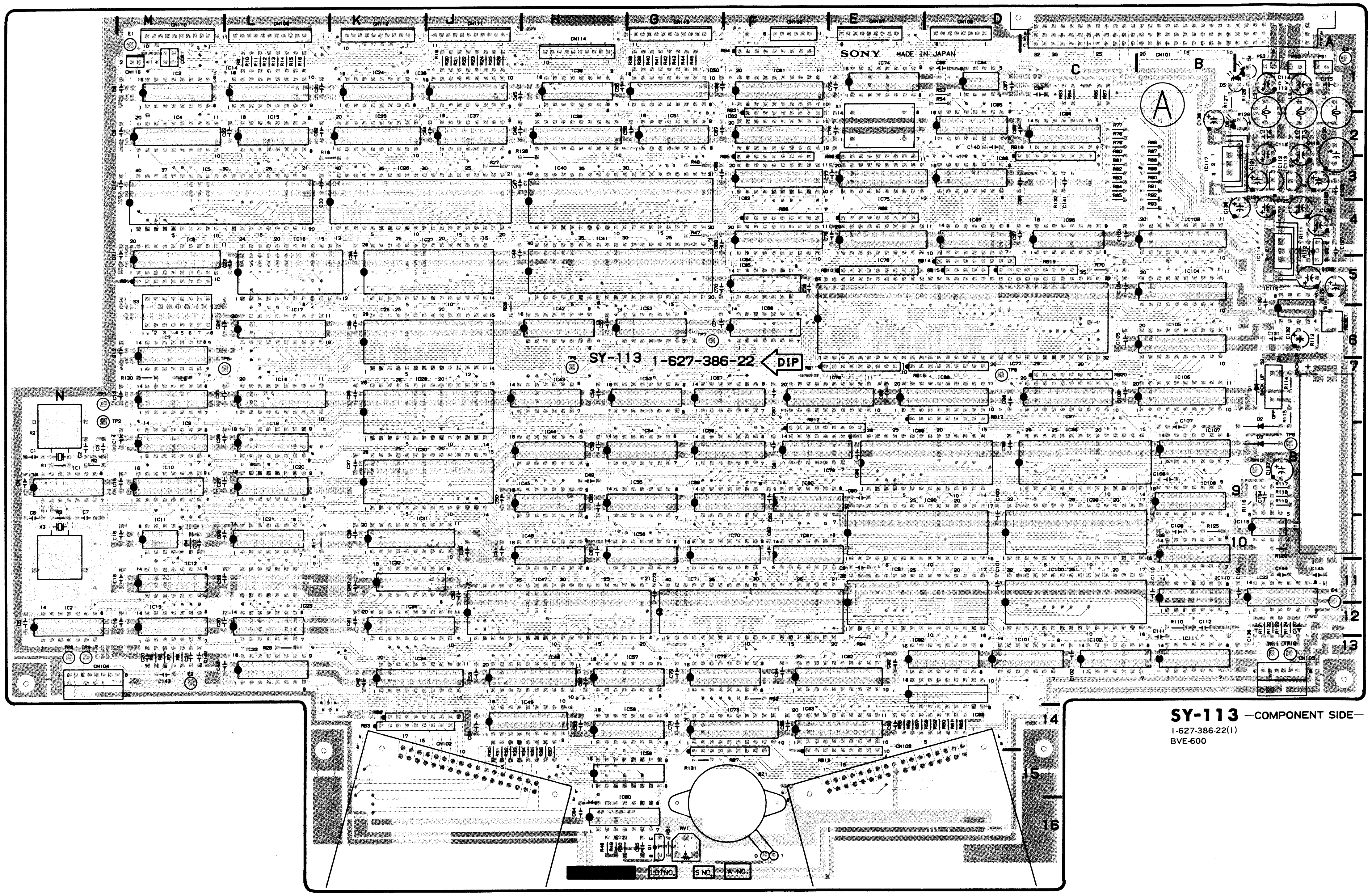
S/N 20001 AND HIGHER(UC)
S/N 20001 AND HIGHER(J)
S/N 20001 AND HIGHER(EK)



NOTE; D4, D5 and D6 are not mounted.

SY-113; SYSTEM CONTROL

S/N 20001 AND HIGHER(UC)
S/N 20001 AND HIGHER(J)
S/N 20001 AND HIGHER(EK)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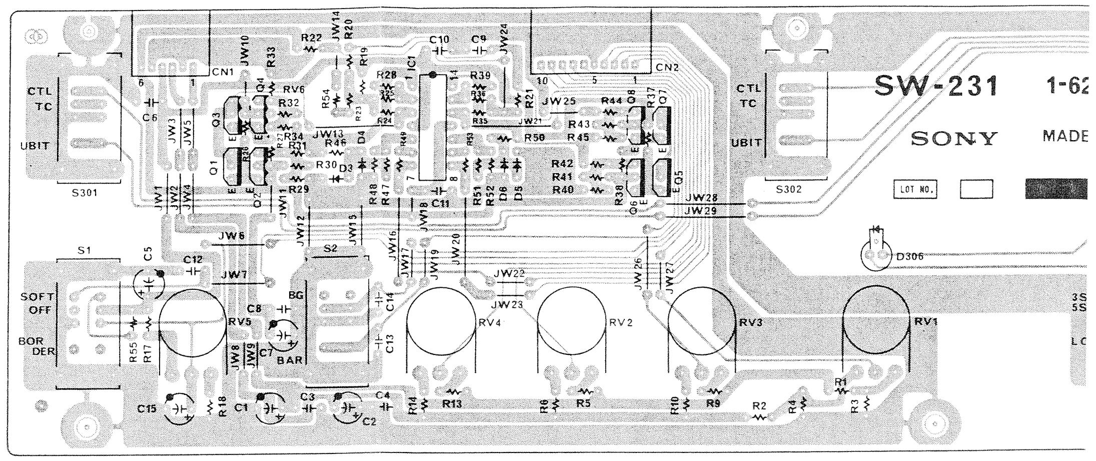
SONY MADE IN JAPAN
SY-113 1-627-386-22
DIP
LOT NO.
S NO.
A NO.

SY-113 —COMPONENT SIDE—
1-627-386-22(1)
BVE-600

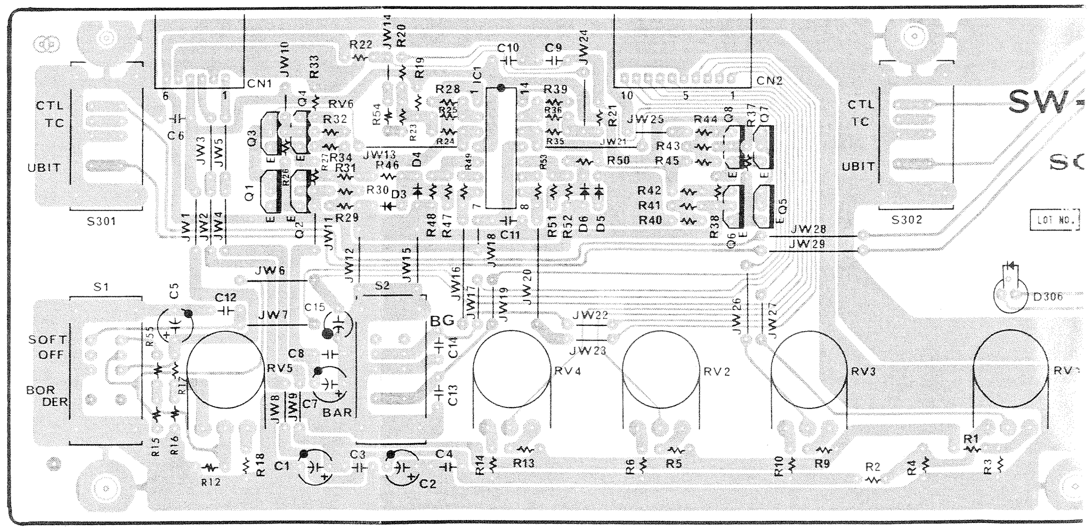
NOTE; D4, D5 and D6 are not mounted.

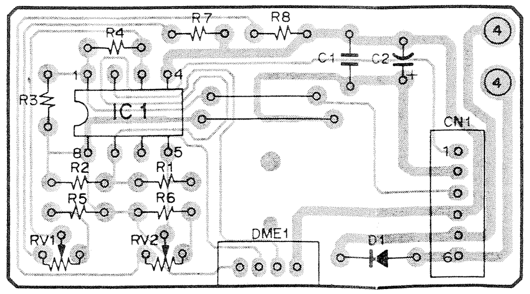
SW-231; VR/SWITCH SELECT
DET-3; SEARCH DIAL DETECTOR

S/N UP TO 10210(UC)
S/N UP TO 10135(J)
S/N UP TO 10160(EK)


SW-231
SONY
MADE
CTL
TC
UBIT
S301
S302
S1
S2
SOFT
OFF
BOR
DER
BG
BAR
CN1
CN2
IC1
RV1
RV2
RV3
RV4
RV5
RV6
D306
LOT NO.

S/N 10211 AND HIGHER(UC)
S/N 10136 AND HIGHER(J)
S/N 10161 AND HIGHER(EK)

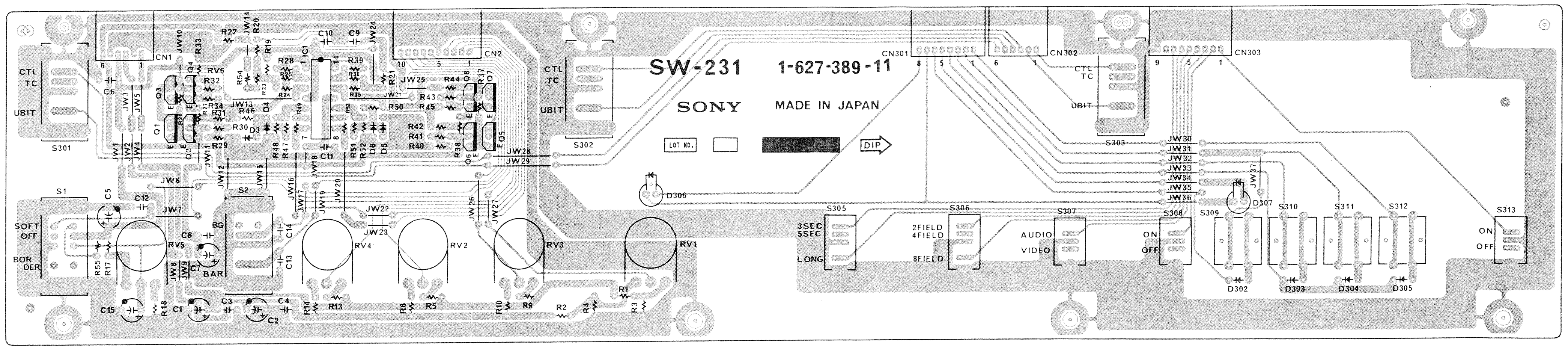

CTL
TC
UBIT
S301
S302
S1
S2
SOFT
OFF
BOR
DER
BG
BAR
CN1
CN2
IC1
RV1
RV2
RV3
RV4
RV5
RV6
D306
LOT NO.


R4
R7
R8
R3
IC 1
C1
C2
R2
R1
R5
R6
RV1
RV2
DME1
D1
CN1
4
4

DET-3 —COMPONENT SIDE—
1-618-489-11(1)
BVE-600

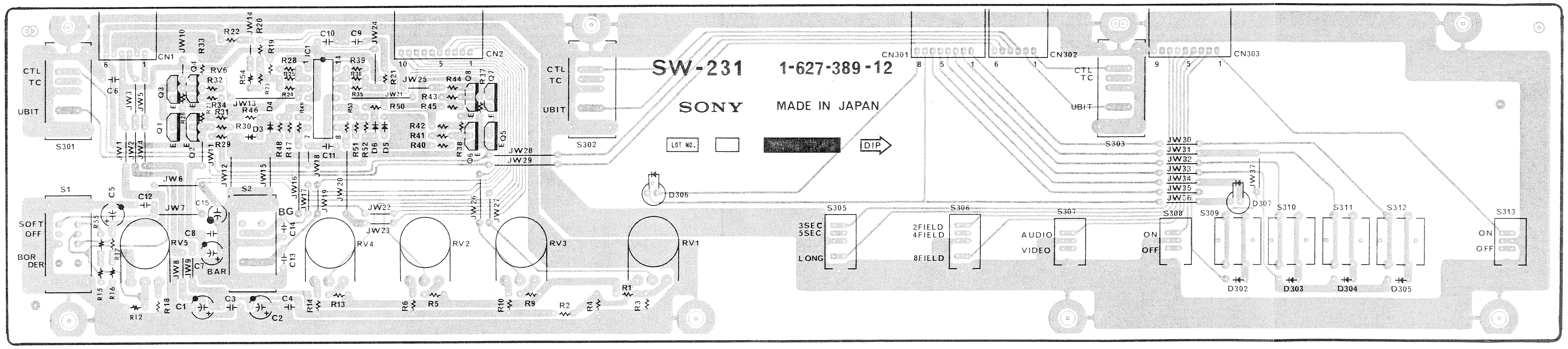
SW-231; VR/SWITCH SELECT
DET-3; SEARCH DIAL DETECTOR

S/N UP TO 10210(UC)
S/N UP TO 10135(J)
S/N UP TO 10160(EK)

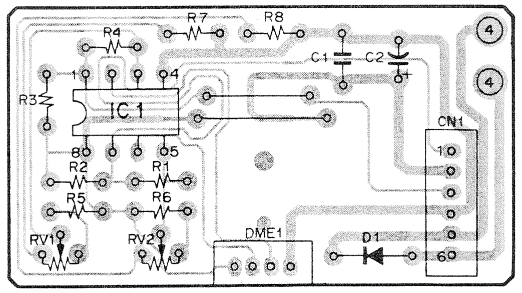

SW-231
1-627-389-11
SONY
MADE IN JAPAN
LOT NO.
DIP
CN1
CN2
CN301
CN302
CN303
CTL
TC
UBIT
S301
S302
S303
S1
S2
SOFT
OFF
BOR
DER
BG
BAR
RV1
RV2
RV3
RV4
RV5
RV6
IC1
D306
D307
D302
D303
D304
D305
S305
S306
S307
S308
S309
S310
S311
S312
S313
3SEC
5SEC
LONG
2FIELD
4FIELD
8FIELD
AUDIO
VIDEO
ON
OFF
JW30
JW31
JW32
JW33
JW34
JW35
JW36
JW37

SW-231 —COMPONENT SIDE—
1-627-389-11(1)
BVE-600

S/N 10211 AND HIGHER(UC)
S/N 10136 AND HIGHER(J)
S/N 10161 AND HIGHER(EK)

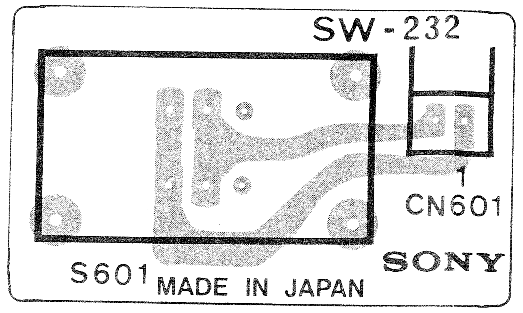

SW-231
1-627-389-12
SONY
MADE IN JAPAN
LOT NO.
DIP
CN1
CN2
CN301
CN302
CN303
CTL
TC
UBIT
S301
S302
S303
S1
S2
SOFT
OFF
BOR
DER
BG
BAR
RV1
RV2
RV3
RV4
RV5
RV6
IC1
D306
D307
D302
D303
D304
D305
S305
S306
S307
S308
S309
S310
S311
S312
S313
3SEC
5SEC
LONG
2FIELD
4FIELD
8FIELD
AUDIO
VIDEO
ON
OFF
JW30
JW31
JW32
JW33
JW34
JW35
JW36
JW37

SW-231 —COMPONENT SIDE—
1-627-389-12(1)
BVE-600

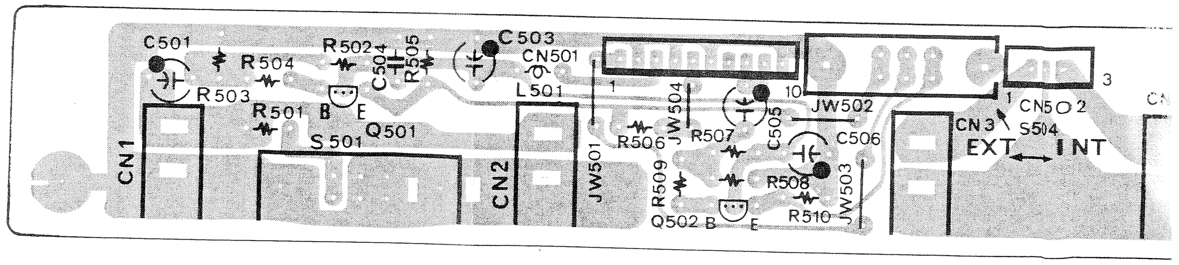

R4
R7
R8
C1
C2
R3
IC 1
R2
R1
R5
R6
RV1
RV2
DME1
D1
CN1
④
④

DET-3 —COMPONENT SIDE—
1-618-489-11(1)
BVE-600

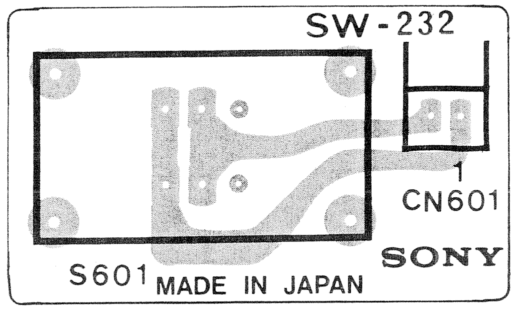
SW-232; SWITCH
CN-249; CONNECTOR BOARD


SW-232
1
CN601
SONY
S601
MADE IN JAPAN

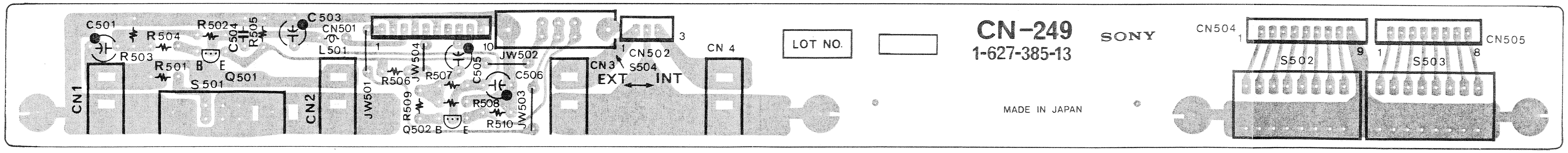
SW-232 – COMPONENT SIDE–
1-627-383-12(1)
BVE-600


C501
R504
R503
R501
R502
C504
R505
B
E
Q501
S501
C503
CN501
L501
CN1
CN2
JW501
1
JW504
R506
R507
10
C505
JW502
C506
R509
R508
R510
JW503
Q502 B
E
1
CN3
CN5
2
3
S504
EXT
INT

SW-232; SWITCH
CN-249; CONNECTOR BOARD

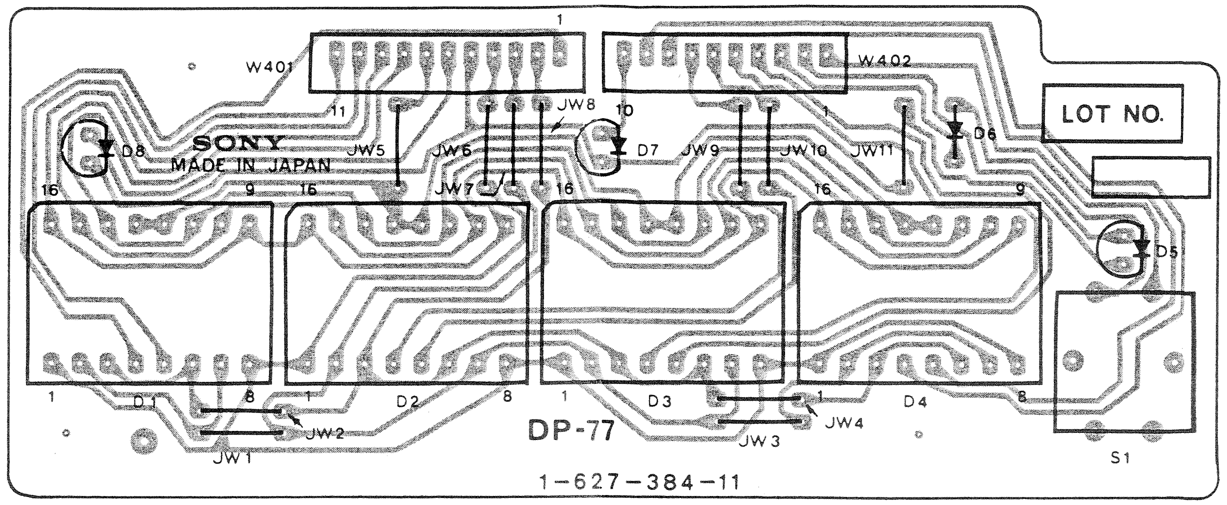

SW-232
1
CN601
SONY
S601
MADE IN JAPAN

SW-232 — COMPONENT SIDE—
1-627-383-12(1)
BVE-600


C501
R504
R502
C504
R505
C503
CN501
R503
R501
B
E
Q501
S501
L501
CN1
CN2
JW501
R506
JW504
R507
C505
10
JW502
C506
R509
R508
Q502
B
E
R510
JW503
CN3
1
CN502
S504
EXT
INT
3
CN 4
LOT NO.
CN-249
1-627-385-13
SONY
MADE IN JAPAN
CN504
1
S502
9
1
S503
8
CN505

CN-249 — COMPONENT SIDE—
1-627-385-13(1)
BVE-600

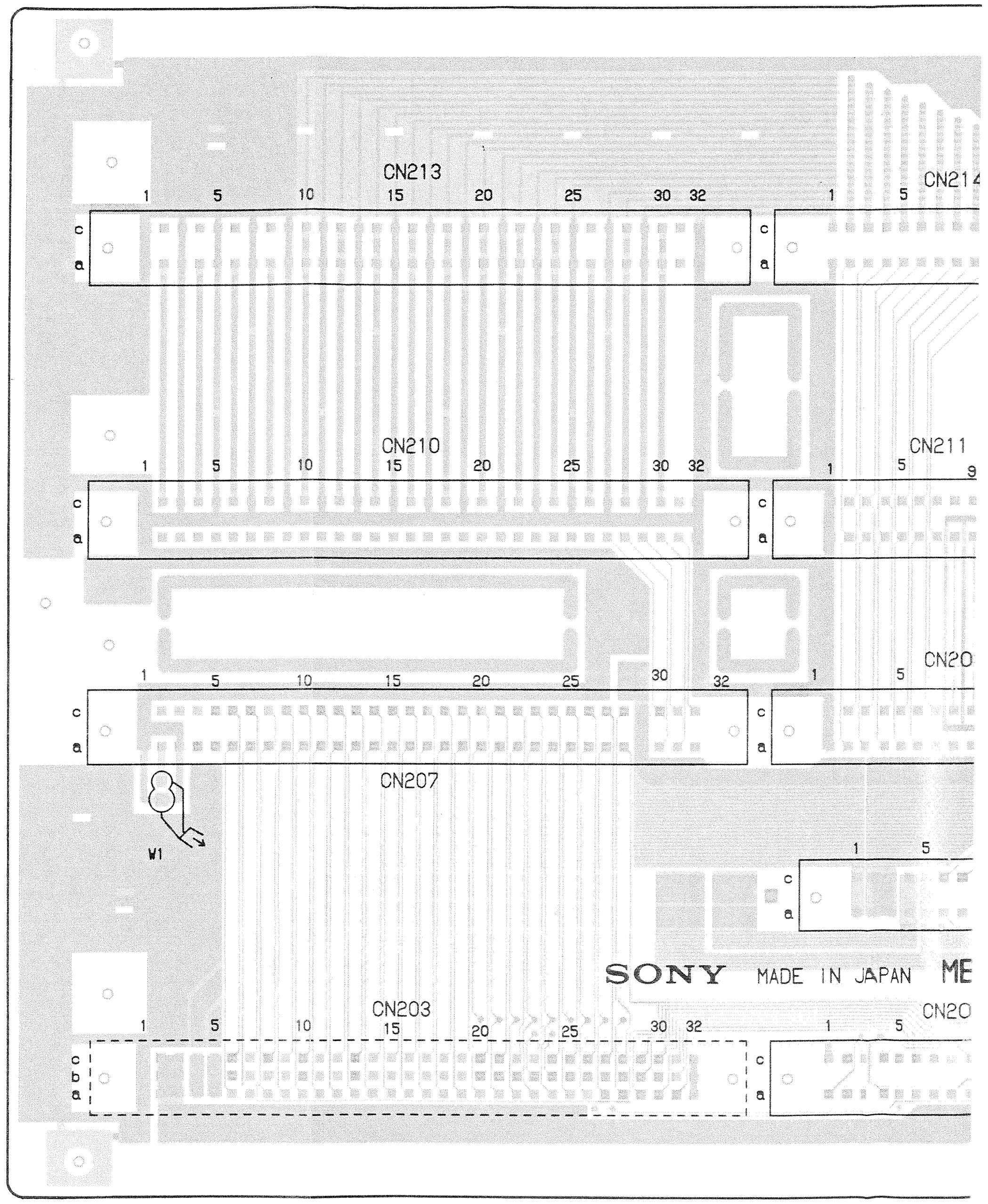
DP-77; TIME COUNTER DISPLAY


W401
1
11
W402
10
1
JW8
SONY
MADE IN JAPAN
JW5
JW6
JW7
D7
JW9
JW10
JW11
D6
D8
LOT NO.
16
9
16
16
16
9
D5
1
D1
8
1
D2
8
1
D3
1
D4
8
JW2
JW1
DP-77
JW3
JW4
S1
1-627-384-11

DP-77 —COMPONENT SIDE—
1-627-384-11(1)
BVE-600

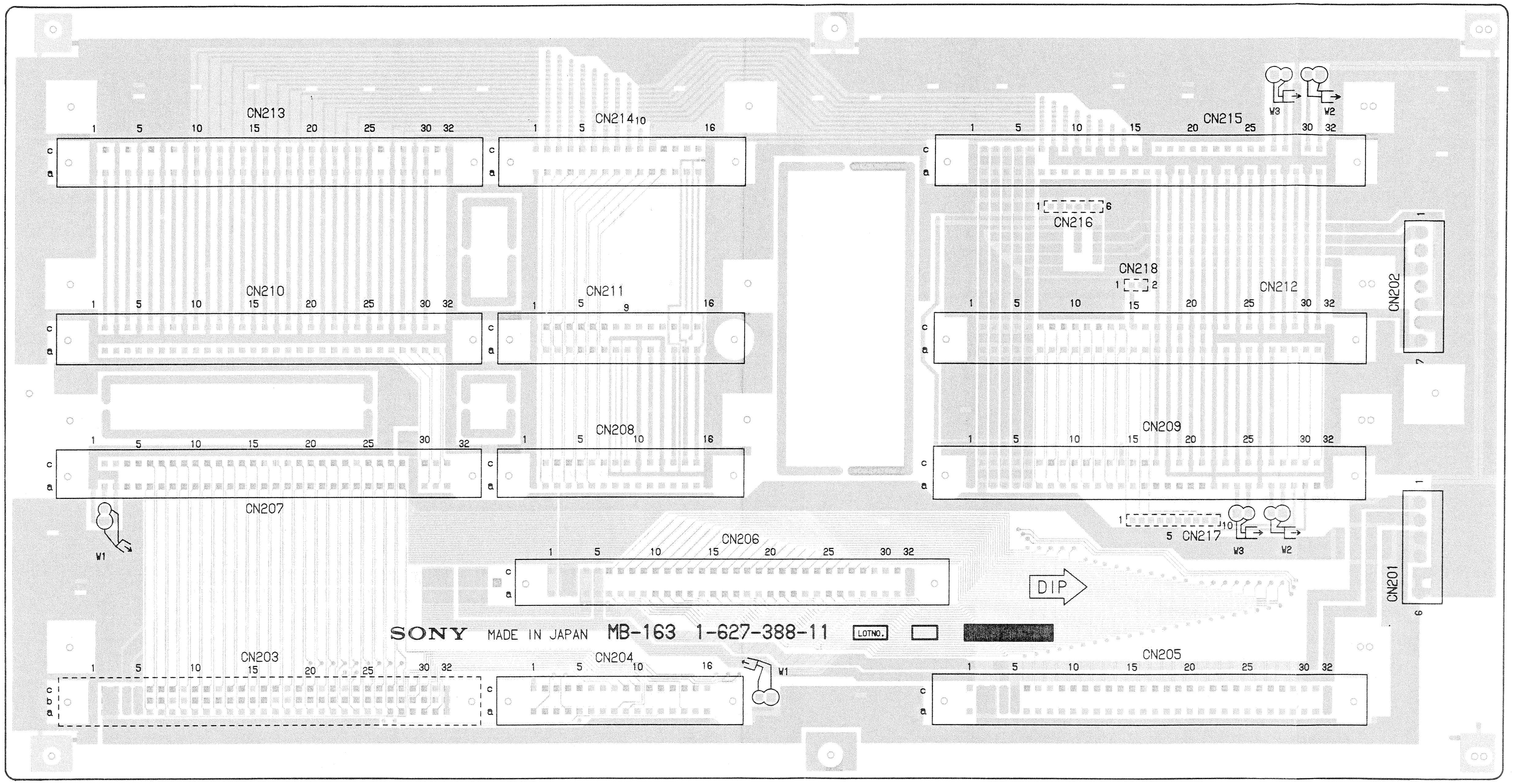
MB-163; MOTHER BOARD

S/N UP TO 10210(UC)
S/N UP TO 10135(J)
S/N UP TO 10160(EK)


CN213
1 5 10 15 20 25 30 32
c
a
CN21
1 5
CN210
1 5 10 15 20 25 30 32
c
a
CN211
1 5 9
CN20
CN207
1 5 10 15 20 25 30 32
W1
SONY MADE IN JAPAN ME
CN203
1 5 10 15 20 25 30 32
c
b
a
CN20
1 5

MB-163; MOTHER BOARD

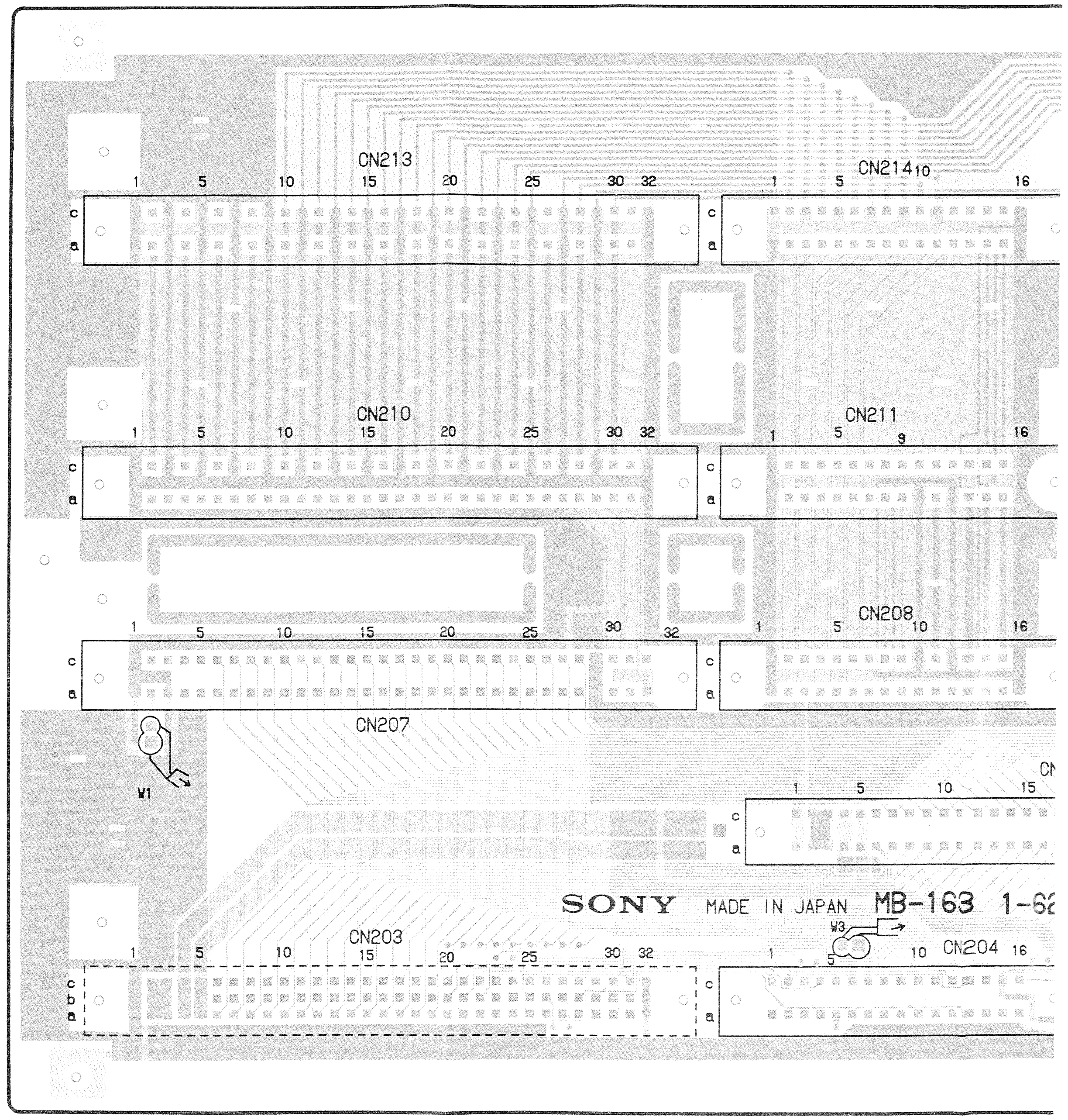
S/N UP TO 10210(UC)
S/N UP TO 10135(J)
S/N UP TO 10160(EK)


CN213
CN214
CN215
W3
W2
CN216
CN218
CN210
CN211
CN212
CN202
CN208
CN209
CN207
W1
CN206
CN217
W3
W2
DIP
CN201
SONY MADE IN JAPAN MB-163 1-627-388-11
LOT NO.
CN203
CN204
W1
CN205

MB-163 —COMPONENT SIDE—
1-627-388-11(1)
BVE-600

MB-163; MOTHER BOARD

S/N 10211 AND HIGHER(UC)
S/N 10136 AND HIGHER(J)
S/N 10161 AND HIGHER(EK)


CN213
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CN211
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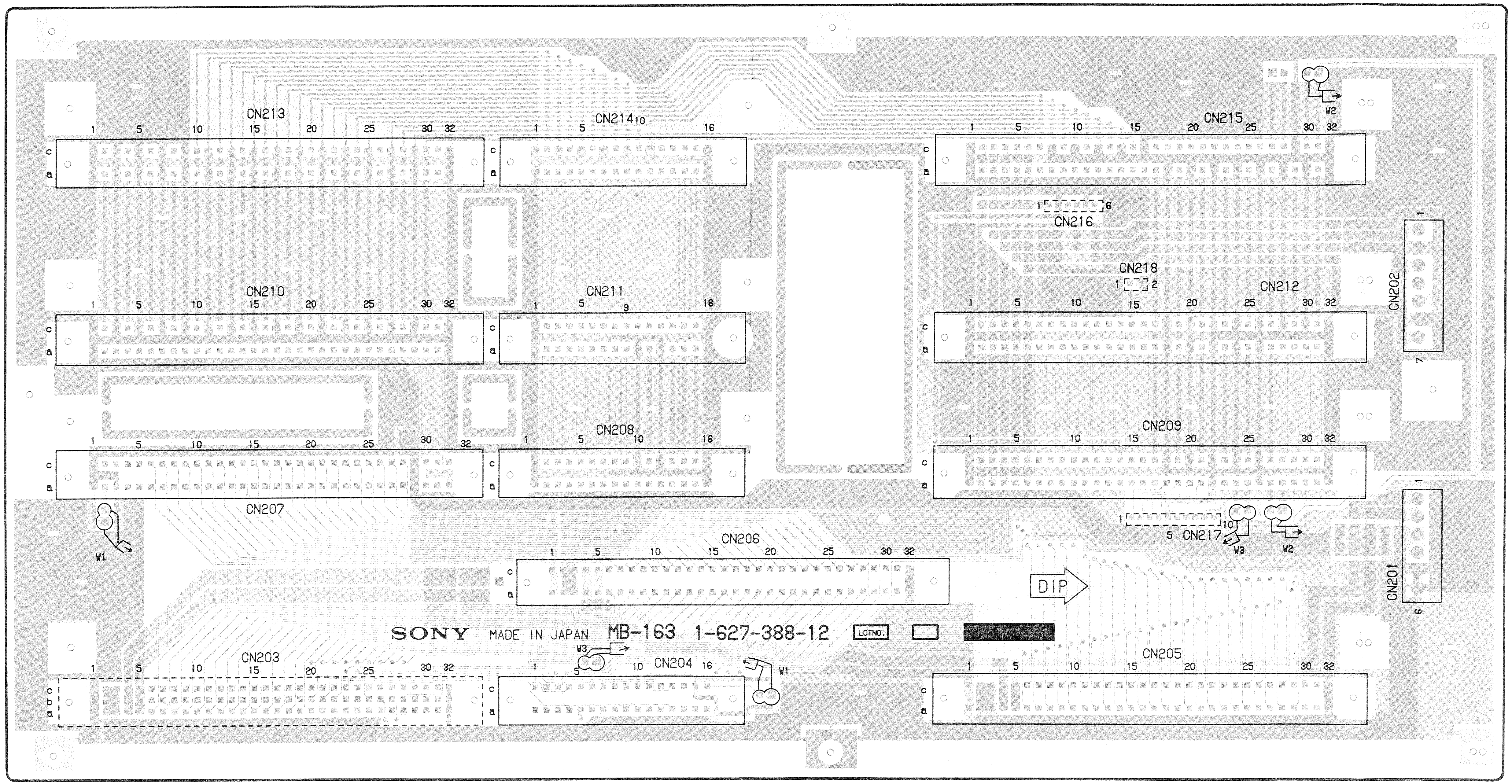
CN203
CN204
W1
W3
SONY MADE IN JAPAN MB-163 1-6
c
b
a

MB-163; MOTHER BOARD

S/N 10211 AND HIGHER(UC)
S/N 10136 AND HIGHER(J)
S/N 10161 AND HIGHER(EK)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SONY MADE IN JAPAN MB-163 1-627-388-12
LOTNO.
CN203
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CN205
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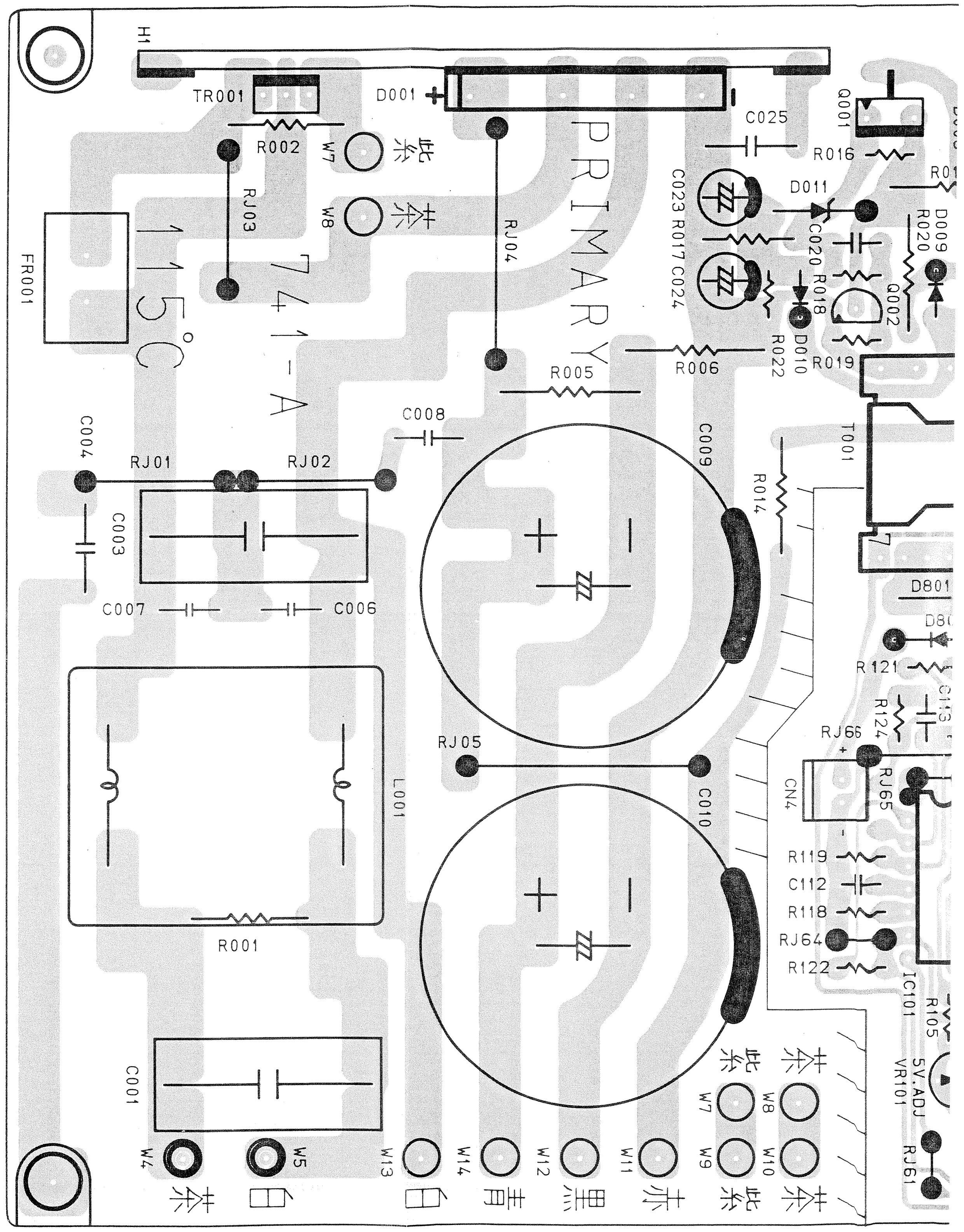
W2
W3

MB-163 —COMPONENT SIDE—
1-627-388-12(1)
BVE-600

741-A; SWITCHING REGULATOR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R002
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RJ04
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R016
C023 R017 C024
D011
C020
R018
R020
D009
Q002
D010
R022
R019
R005
R006
C008
C004
RJ01
RJ02
C003
C009
R014
T001
D801
C007
C006
R121
R124
C113
RJ66
RJ65
CN4
RJ05
L001
R001
C010
R119
C112
R118
RJ64
R122
IC101
R105
5V.ADJ
VR101
RJ61
C001
W4
W5
W13
W14
W12
W11
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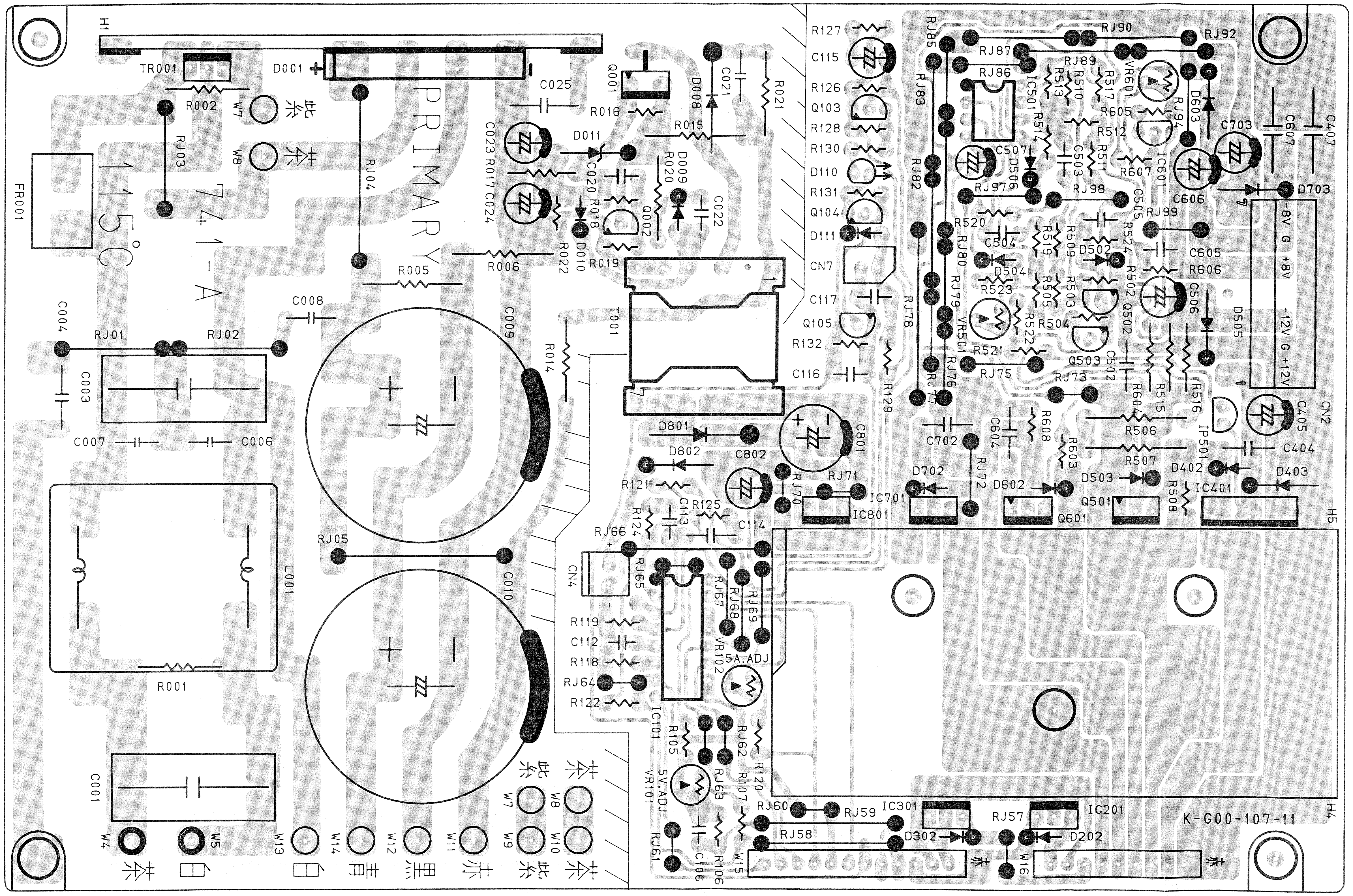
W9
W10
紫
茶
白
青
黒
赤

741-A; SWITCHING REGULATOR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R002
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RJ04
FR001
115°C
741-A
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Q001
D008
C021
R021
R016
R015
D011
C023 R017 C024
C020
R018
D010
R022
R020
D009
Q002
C022
R019
R005
R006
C004
RJ01
RJ02
C008
C009
C003
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D802
C801
C802
R121
RJ70
RJ71
IC701
IC801
R124
C113
R125
C114
RJ66
CN4
RJ65
RJ67
RJ68
RJ69
R119
C112
R118
RJ64
R122
VR102
5A.ADJ
IC101
R105
RJ62
R120
R107
RJ63
5V.ADJ
VR101
RJ61
C106
R106
W15
RJ60
RJ59
IC301
RJ58
D302
RJ57
IC201
D202
W16
K-G00-107-11
H4
H5
RJ05
C010
L001
R001
C001
W4
W5
W13
W14
W12
W11
W9
W10
白
青
黒
赤
紫
茶
R127
C115
R126
Q103
R128
R130
D110
R131
Q104
D111
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Q105
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C116
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VR601
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R514
R605
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D506
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R511
R607
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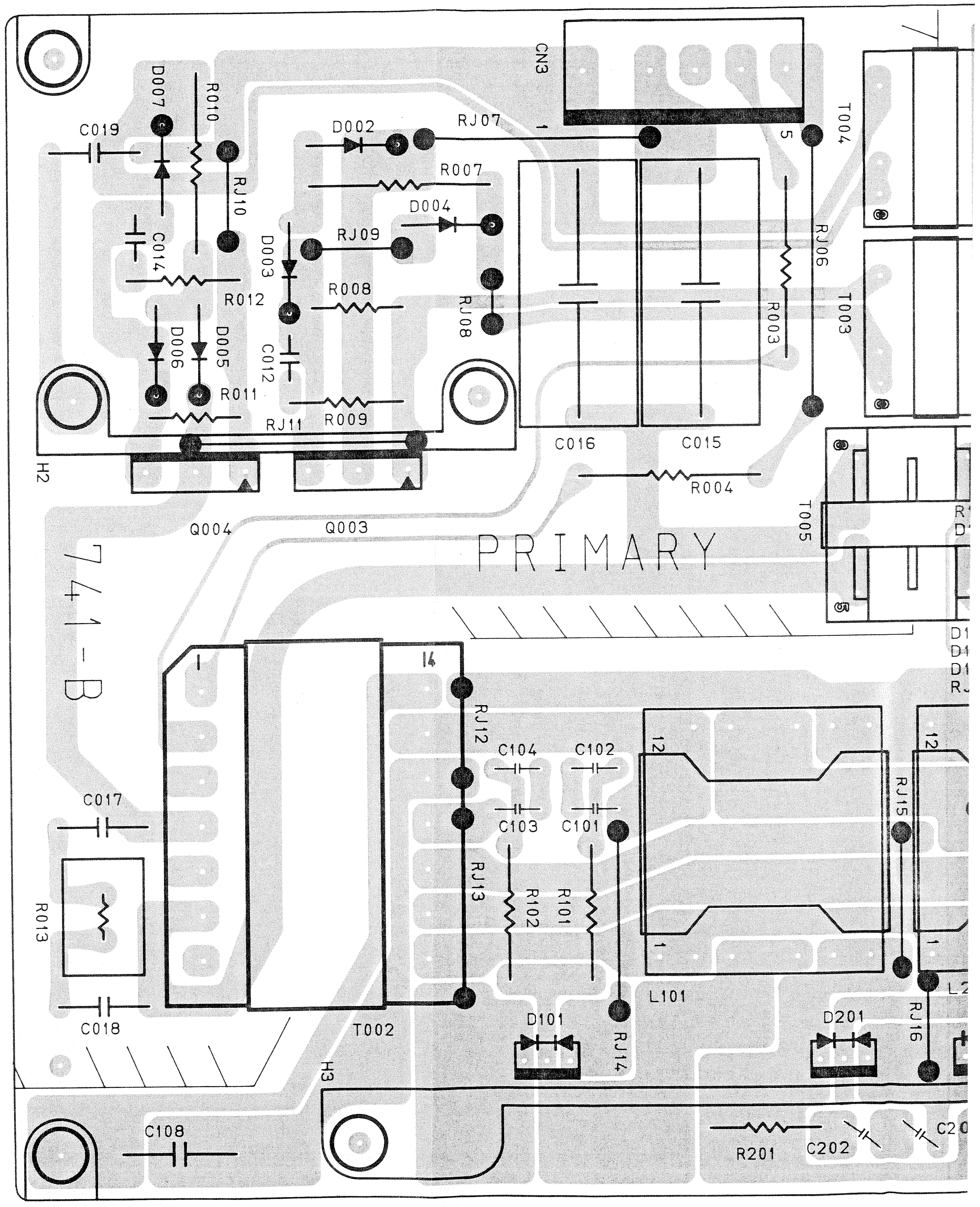
Q503
C502
R601
R515
R516
R608
C604
C702
R506
IP501
C405
CN2
R603
R507
C404
D702
D602
D503
D402
D403
R508
IC401
Q501
Q601
-8V G +8V
-12V G +12V

741-A —COMPONENT SIDE—

BVE-600(1)

741-B; SWITCHING REGULATOR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RJ08
D006
D005
C012
R011
RJ11
R009
C016
C015
R004
R003
RJ06
T004
T003
T005
H2
Q004
Q003
PRIMARY
741-B
14
RJ12
C104
C102
C103
C101
RJ13
R102
R101
C017
R013
L101
D101
RJ14
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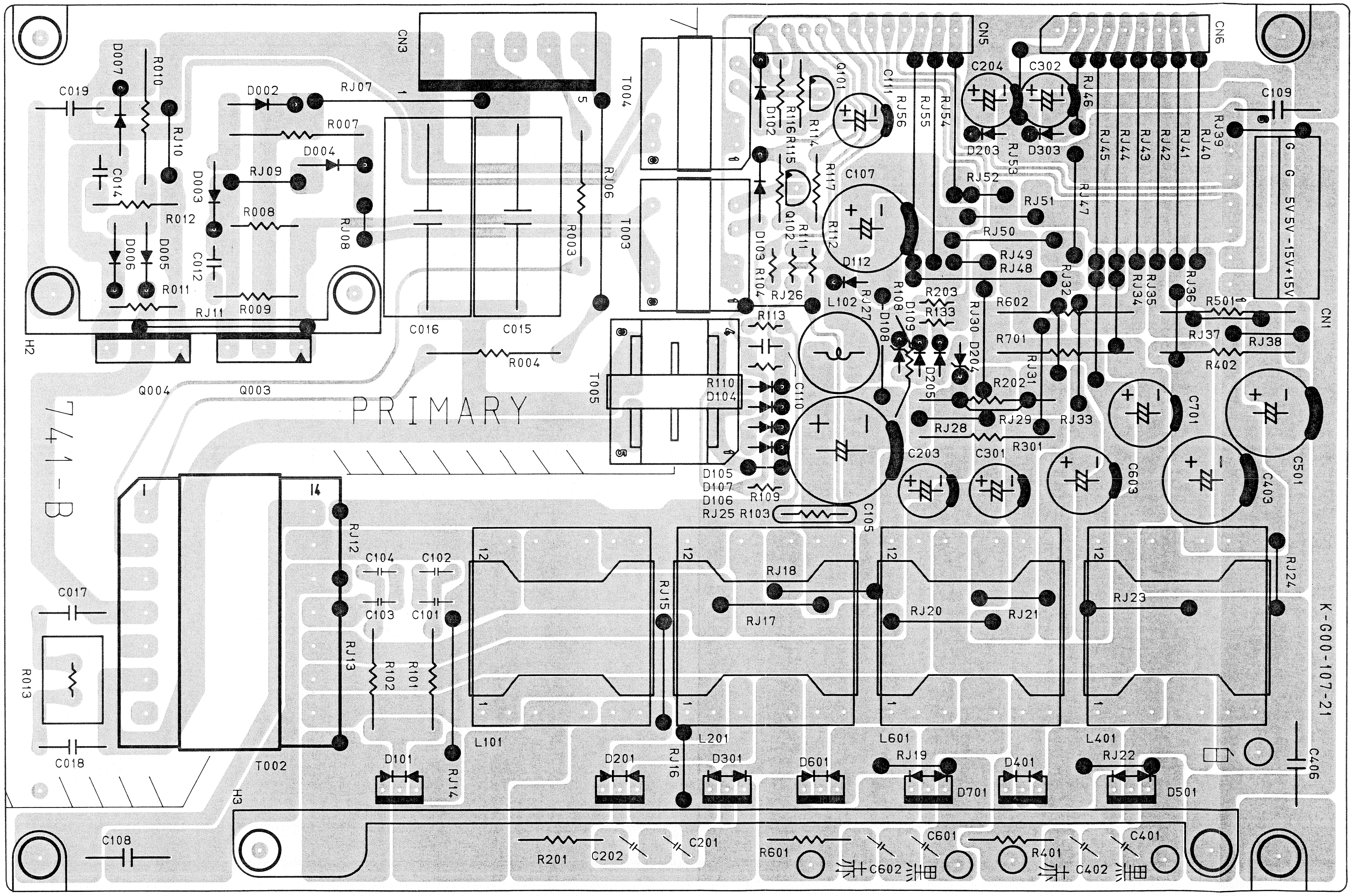
C108
R201
C202
D201
RJ15
RJ16
12
1
5

741-B; SWITCHING REGULATOR


CN3
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T003
T005
T002
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D007
R010
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D005
C012
D003
R011
RJ11
R009
D002
RJ07
R007
D004
RJ09
R008
RJ08
C016
C015
RJ06
R003
R004
Q004
Q003
H2
H3
PRIMARY
741-B
D102
R116
R115
R114
R117
Q101
Q102
C111
RJ56
RJ55
RJ54
C107
R112
R111
D103
R104
RJ26
D112
RJ27
R113
L102
R108
D108
D109
D205
D204
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D104
C110
D105
D107
D106
RJ25
R109
R103
C105
C204
C302
RJ46
D203
D303
RJ53
RJ52
RJ51
RJ50
RJ49
RJ48
RJ47
RJ32
R203
R133
R602
R701
RJ31
R202
RJ29
RJ28
R301
RJ33
C203
C301
C603
RJ45
RJ44
RJ43
RJ42
RJ41
RJ40
RJ39
RJ34
RJ35
RJ36
C109
G
G
5V
5V
-15V
+15V
R501
RJ37
RJ38
R402
C701
C501
C403
RJ12
C104
C102
C103
C101
C017
RJ13
R102
R101
R013
C018
RJ14
D101
L101
RJ15
RJ16
L201
D201
D301
D601
RJ17
RJ18
RJ19
RJ20
RJ21
L601
D701
D401
RJ22
L401
D501
RJ23
RJ24
C406
K-G00-107-21
C108
R201
C202
C201
R601
C601
C602
R401
C402
C401
1
5
12
14

741-B —COMPONENT SIDE—
BVE-600(1)

SECTION 9
SPARE PARTS AND FIXTURE

9-1. PARTS INFORMATION

(1) The shaded and ⚠ -marked components are critical to safety.
Replace only with same components as specified.

(2) Replacement Parts supplied from the Sony Parts Center will sometimes have a different shape from the original parts. This is due to "accommodating the improved parts and/or engineering changes" or "standardization of genuine parts".
This manual's exploded views and electrical spare parts list indicate the part numbers of "the standardized genuine parts at the present". Regarding engineering part changes in out engineering department, refer to Sony service bulletins and service manual supplements.

(3) The parts marked with "s" in the SP column of the exploded views and electrical spare parts list are normally stocked for replacement purposes. The parts marked with "o" in the SP column are not normally required for routine service work. Orders for parts marked with "o" will be processed, but allow for additional delivery time.

(4) Item with no part number and/or no description are not stocked because they are seldom required for routine service.

(5) ABBREVIATIONS

Ref.No.	Description
BT	; BATTERY
BZ	; BUZZER
C	; CAPACITOR
CB	; CIRCUIT BREAKER
CN	; CONNECTOR
D	; DIODE
FR	; FLUORESCENT LAMP
IC	; INTEGRATED CIRCUIT
L	; INDUCTOR
P	; PHONE PLUG
Q	; TRANSISTOR
R	; RESISTOR
RB	; RESISTOR BLOCK
RV	; VARIABLE RESISTOR
S(SW)	; SWITCH
T	; TRANSFORMER
X	; CRYSTAL

All capacitors are in micro farads unless otherwise specified.

All inductors are in micro henries unless otherwise specified.

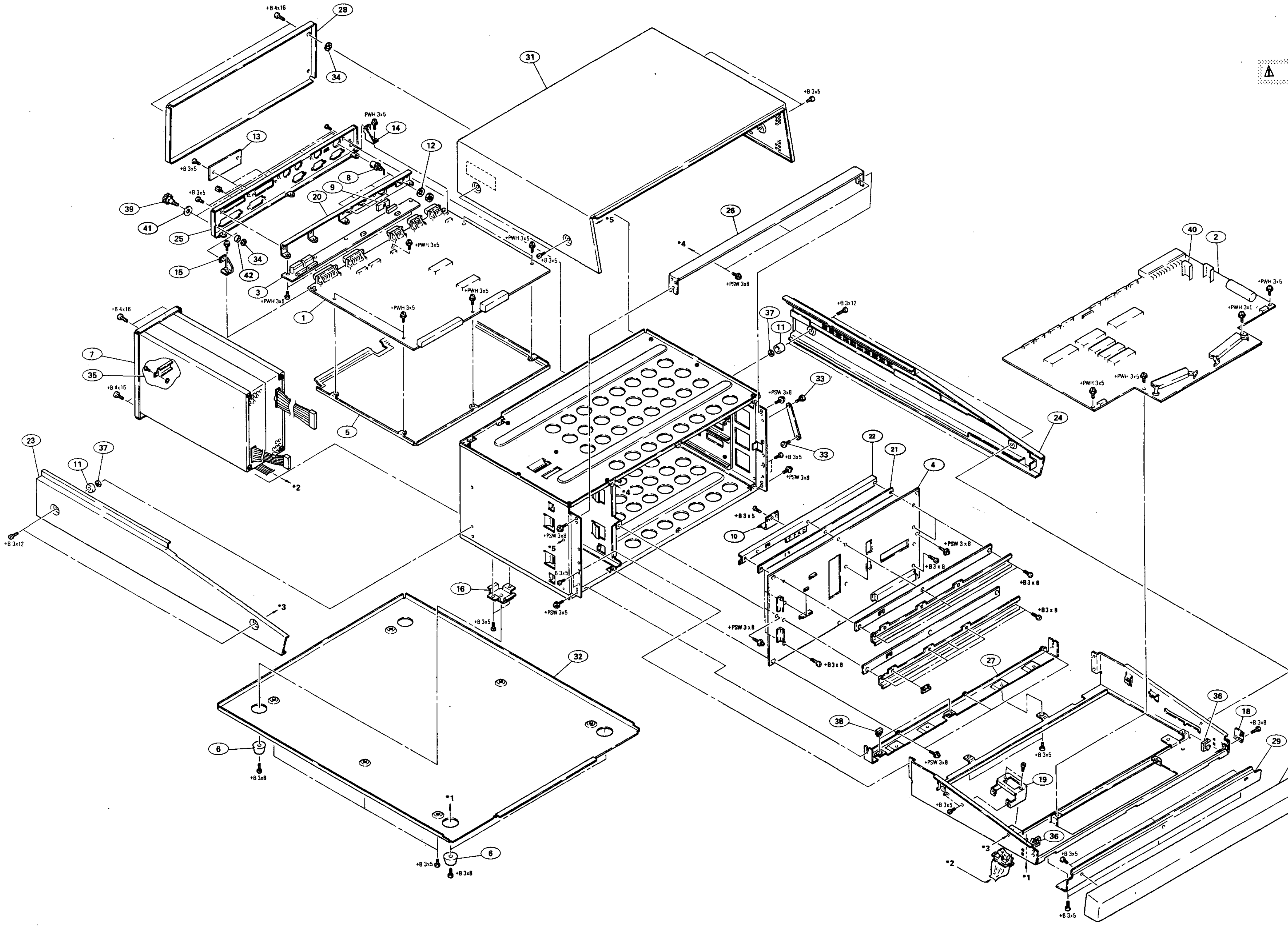
All resistors are in ohms.

9-2. EXPLODED VIEW

.Exploded views are composed of the following blocks.

(1) Chassis Block
(2) DP Panel Block
(3) Key Panel Block
(4) Switching Regulator

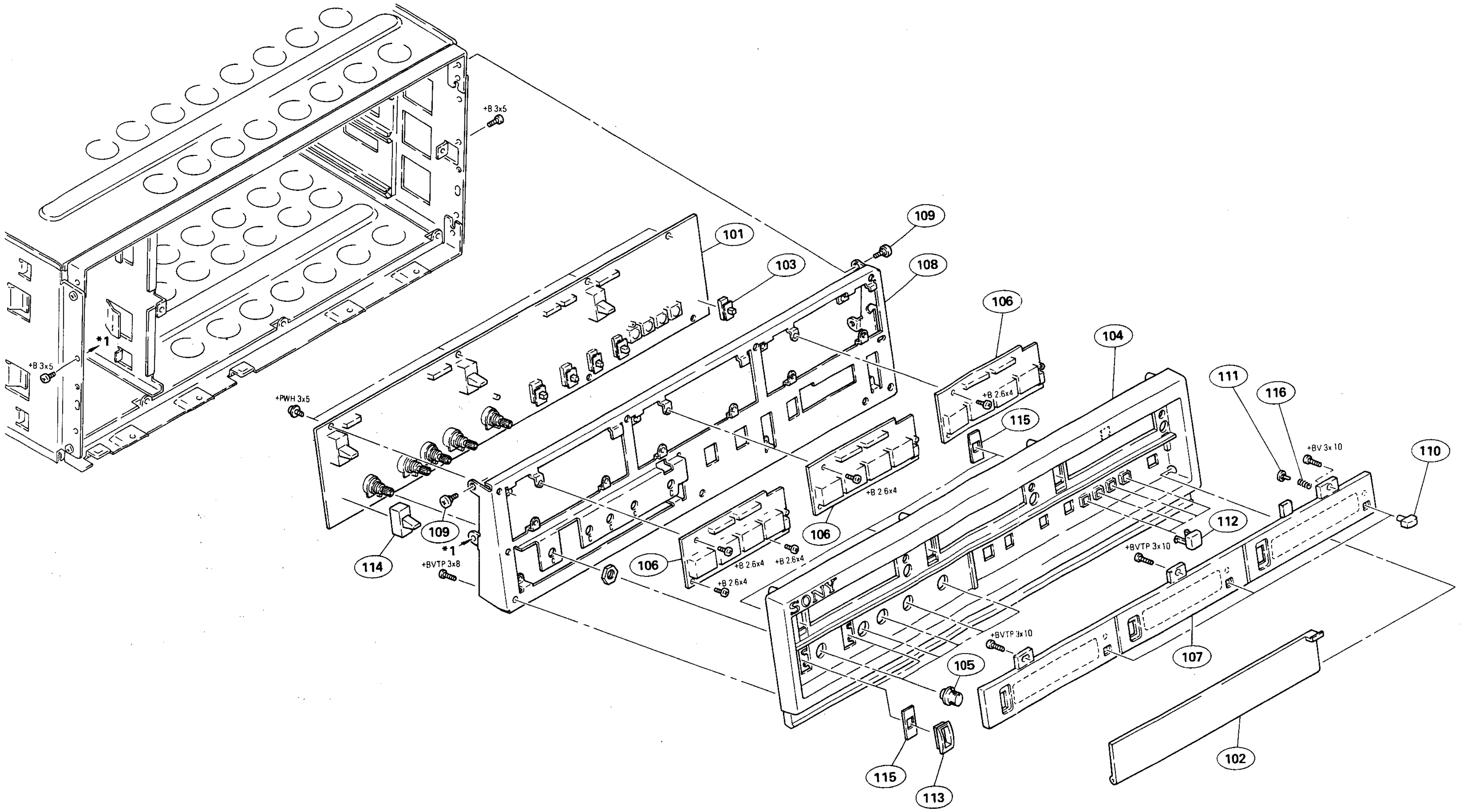
Chassis Block



28
+B 4x16
34
31
+B 3x5
13
PWH 3x5
14
12
8
9
20
+B 3x5
39
41
25
34
15
42
3
+PWH 3x5
1
+PWH 3x5
*5
26
*4
+PSW 3x8
37
11
+B 3x12
24
40
2
+PWH 3x5
+B 4x16
7
35
+B 4x16
5
33
+PSW 3x8
+B 3x5
+PSW 3x8
23
11
37
*2
+B 3x12
*3
10
22
21
4
+PSW 3x8
+B 3x8
+PSW 3x5
16
+B 3x5
32
6
+B 3x8
*1
6
+B 3x5
+B 3x8
27
38
36
18
29
30
19
36
*2
*3
*1
+B 3x5

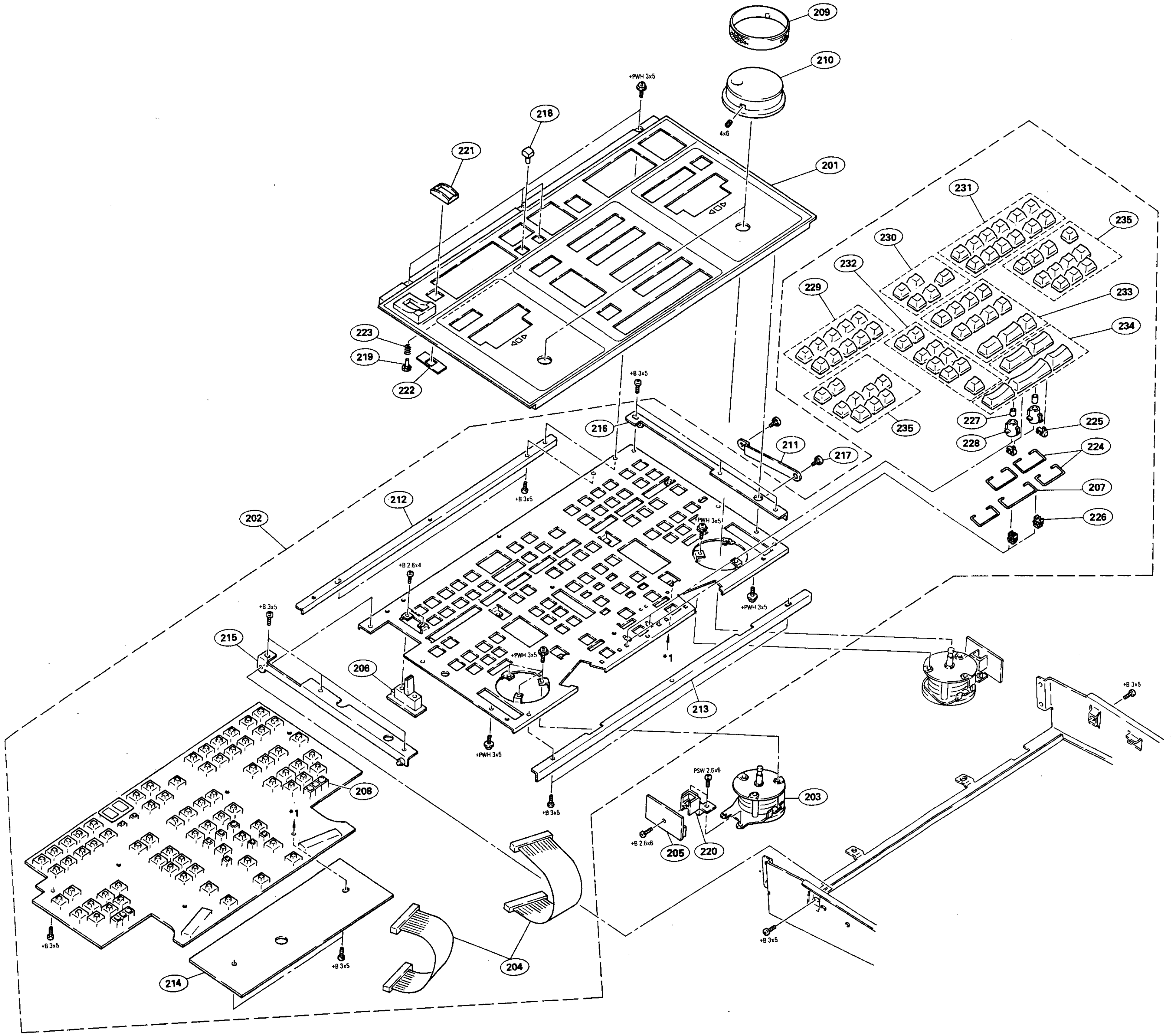
No.	Part No.	SP	Description
1	A-6259-342-B	o	MOUNTED CIRCUIT BOARD, IF-167
2	A-6259-343-B	o	MOUNTED CIRCUIT BOARD, SY-113
3	A-6268-231-A	o	MOUNTED CIRCUIT BOARD, CN-249
4	A-6268-235-A	o	MOUNTED CIRCUIT BOARD, MB-163
5	X-2131-102-1	o	PLATE ASSY, SHIELD
6	X-3556-910-1	s	FOOT ASSY, MF
⚠ 7	1-413-371-11	s	SWITCHING REGULATOR
8	1-563-354-12	s	CONNECTOR, BNC
9	2-125-569-01	o	CUSHION, SW
10	2-131-101-01	o	BRACKET (MB-1)
11	2-131-102-01	o	SPACER
12	2-131-104-01	o	WASHER, FLAT
13	2-131-105-01	o	PLATE, BLIND
14	2-131-106-01	o	REINFORCEMENT (A), CARD PANEL
15	2-131-107-01	o	REINFORCEMENT (B), CARD PANEL
16	2-131-108-01	o	TABLE, FOOT
17	2-131-110-01	o	STAY (B)
18	2-131-113-01	o	PLATE, FIXED, SHAFT
19	2-131-114-01	o	BRACKET, SW
20	2-131-131-01	o	BRACKET (F)
21	2-131-132-01	o	INSULATOR (MB)
22	2-131-133-01	o	PLATE, FIXED, CONNECTOR
23	2-131-135-01	o	COVER (LEFT), SIDE
24	2-131-136-01	o	COVER (RIGHT), SIDE
25	2-131-141-01	o	PANEL, CONNECTOR, IF-167
26	2-131-142-01	o	REINFORCEMENT (UPPER)
27	2-131-143-01	o	REINFORCEMENT (LOWER)
28	2-131-148-01	o	PANEL (B), BLANK
29	2-131-149-01	o	BRACKET, PAD
30	2-131-150-01	o	PAD
31	2-131-151-01	o	COVER, TOP
32	2-131-152-01	o	COVER, BOTTOM
33	3-613-164-03	o	SHAFT, STEP
34	3-650-537-01	o	WASHER
35	3-673-210-11	o	COVER, SWITCH
36	3-677-153-03	o	HOLDER (FOR UC, UP TO S/N 10030) (FOR EK, UP TO S/N 10020) (FOR J, UP TO S/N 10015)
37	3-694-792-01	o	WASHER
38	3-703-072-01	o	HOLDER, PCB
39	3-845-334-02	s	SCREW, ORNAMENTAL
40	4-866-647-01	o	HEAT SINK
41	2-133-512-01	s	SPACER, FLAT
42	2-133-513-01	s	SUPPORT

DP Panel Block


101
102
103
104
105
106
106
106
107
108
109
109
110
111
112
113
114
115
115
116
+B 3x5
+B 3x5
+PWH 3x5
+BVTP 3x8
+B 2.6x4
+B 2.6x4
+B 2.6x4
+B 2.6x4
+B 2.6x4
+BV 3x10
+BVTP 3x10
+BVTP 3x10
*1
*1
SONY

No.	Part No.	SP	Description
101	A-6267-137-A	o	MOUNTED CIRCUIT BOARD, SW-231
102	X-2131-105-1	o	COVER ASSY
103	X-2131-101-1	s	KNOB ASSY (3POSI)
104	X-2131-103-4	o	PANEL ASSY, SUB, DP
105	X-3717-237-2	s	KNOB ASSY, VOL
106	1-627-384-11	o	PRINTED CIRCUIT BOARD, DP-77
107	2-131-137-04	o	PANEL, COUNTER
108	2-131-156-01	o	PANEL, SUB, DP
109	3-613-164-03	o	SHAFT, STEP
110	3-668-008-02	s	PUSH BUTTON (3x5)
111	3-668-009-03	s	PIN, PUSH BUTTON
112	3-688-288-01	s	BUTTON, AU
113	3-717-374-02	o	FRAME (23x12), ORNAMENTAL, SW
114	3-717-382-02	s	KNOB, LEVER SW
115	3-717-613-01	o	PLATE, ORNAMENTAL, LSW
116	4-309-349-01	s	SPRING, COIL

Key Panel Block


209
210
+PWH 3x5
4x6
218
221
201
231
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229
233
234
223
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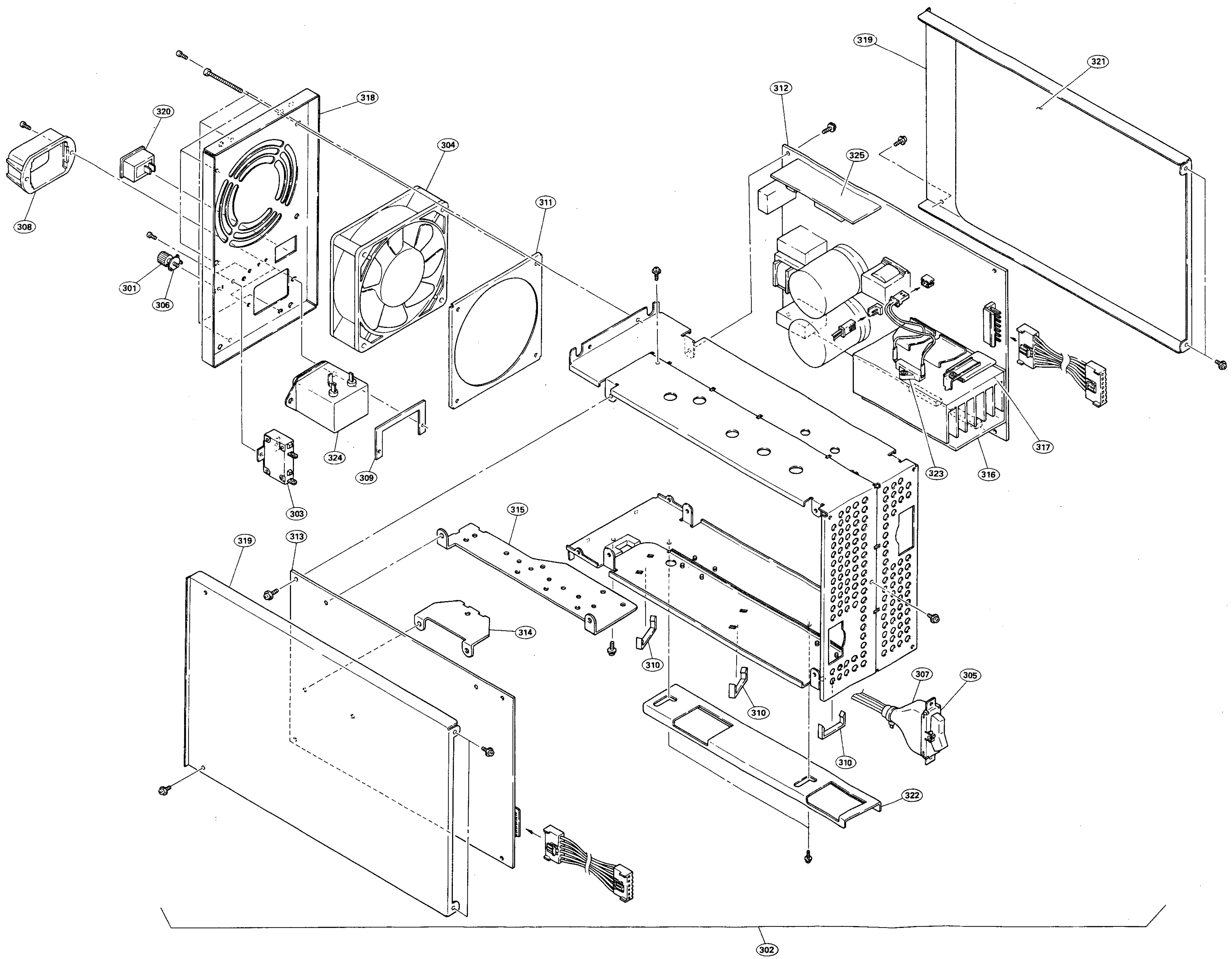
+B 3x5
216
211
217
235
227
225
228
224
207
226
212
+B 3x5
202
+PWH 3x5
+B 2.6x4
+PWH 3x5
+B 3x5
215
206
*1
213
+PWH 3x5
+B 3x5
208
*1
PSW 2.6x6
203
+B 2.6x6
205
220
+B 3x5
214
+B 3x5
204
+B 3x5

No.	Part No.	SP	Description
201	X-2131-104-1	o	PANEL ASSY, KEY
202	1-466-018-11	o	KEY ASSY
203	1-515-618-12	s	CLUTCH, ELECTROMAGNETIC
204	1-574-038-11	s	CABLE ASSY, FLAT
205	1-618-489-11	o	PRINTED CIRCUIT BOARD, DET-3
206	1-627-383-11	o	PRINTED CIRCUIT BOARD, SW-232
207	2-114-404-01	o	LINK
208	2-114-405-01	o	HOLDER, LED
209	2-114-454-01	s	COVER, S DIAL
210	2-114-455-01	o	DIAL, S
211	2-131-109-01	o	STAY (A)
212	2-131-124-01	o	BRACKET (B), KEY
213	2-131-125-01	o	BRACKET (F), KEY
214	2-131-126-01	o	SHEET, INSULATING
215	2-131-127-01	o	BRACKET (RIGHT), KEY
216	2-131-128-01	o	BRACKET (LEFT), KEY
217	3-613-164-03	o	SHAFT, STEP
218	3-668-008-02	s	PUSH BUTTON (3x5)
219	3-668-009-03	s	PIN, PUSH BUTTON
220	3-673-694-01	o	HOLDER, DME
221	3-717-375-02	o	FRAME (18x2), ORNAMENTAL, SW
222	3-717-613-01	o	PLATE, ORNAMENTAL, LSW
223	4-309-349-01	s	SPRING, COIL
224	4-605-532-11	s	LINK
225	4-605-534-02	s	BOSS (UPPER), LINK
226	4-605-535-01	s	BOSS (LOWER), LINK
227	4-605-537-01	s	SOLENOID, GUIDE
228	4-605-538-01	s	CASE, GUIDE
229	9-994-300-01	s	WIPE PATTERN BLOCK
230	9-994-301-01	s	EFFECT TYPE TITLE BLOCK
231	9-994-302-01	s	SOURCE MONITOR BLOCK
232	9-994-303-01	s	TRIM BLOCK
233	9-994-304-01	s	EDIT TIME MARK BLOCK
234	9-994-305-01	s	REC ALL STOP BLOCK
235	9-994-306-01	s	RECORDER PLATYER BLOCK

Switing Regulator



No.	Part No.	SP	Description
301	X-2068-004-0	s	TERMINAL ASSY
⚠ 302	1-413-371-11	s	SWITCHING REGULATOR
303	1-532-541-00	s	BREAKER, CIRCUIT
304	1-541-524-11	s	MOTOR, DC FAN
⚠ 305	1-570-743-31	s	SWITCH, AC
306	2-068-008-00	s	WASHER
307	2-269-962-00	o	COVER, SWITCH
308	2-990-241-01	o	HOLDER (A), PLUG
309	3-625-620-00	s	BRACKET, AC CONNECTOR
310	3-645-289-00	o	CLIP, WIRE
311	3-718-685-01	o	NUT, PLATE FAN
312	9-994-321-01	o	MOUNTED CIRCUIT BOARD, 74-1A
313	9-994-322-01	o	MOUNTED CIRCUIT BOARD, 74-1B
314	9-994-323-01	o	HEAT SINK LM40279
315	9-994-324-01	o	HEAT SINK LM30229
316	9-994-325-01	o	HEAT SINK LM40280
317	9-994-326-01	o	HEAT SINK LM40281
318	9-994-327-01	o	PANEL, LM20235
319	9-994-328-01	o	COVER, LM30213
⚠ 320	9-994-330-01	s	VOLTAGE SELECTOR, SDDJAI-1
321	9-994-331-01	o	INSULATOR, LU30048
322	9-994-329-01	o	RAIL, LM30214
323	9-994-332-01	s	THERMAL SWITCH, OHD3-85B
⚠ 324	9-994-333-01	s	INLET (WITH FILTER), SUP-D3G-E
325	9-994-348-01	o	HEAT SINK LM40278

9-3. ELECTRICAL PARTS LIST

General Purpose Electrical Part list

Parts that are not listed in the "reference number order list"
are shown in the following list.
Reference numbers are omitted.

CAPACITOR, CERAMIC

Part No.	SP	Description
1-161-039-00	s	CAP, CERAMIC 0.001 10% 50V
1-161-041-00	s	CAP, CERAMIC 0.0015 10% 50V
1-161-043-00	s	CAP, CERAMIC 0.0022 10% 50V
1-161-045-00	s	CAP, CERAMIC 0.0033 10% 50V
1-161-047-00	s	CAP, CERAMIC 0.0047 10% 50V
1-161-049-00	s	CAP, CERAMIC 0.0068 10% 50V
1-161-051-00	s	CAP, CERAMIC 0.01 10% 50V
1-161-053-00	s	CAP, CERAMIC 0.015 10% 50V
1-161-055-00	s	CAP, CERAMIC 0.022 10% 50V
1-161-057-00	s	CAP, CERAMIC 0.033 10% 50V
1-161-021-11	s	CAP, CERAMIC 0.047 10% 25V
1-161-059-00	s	CAP, CERAMIC 0.047 10% 50V
1-161-061-00	s	CAP, CERAMIC 0.068 10% 50V
1-161-772-11	s	CAP, CERAMIC 0.1 10% 25V
1-161-063-00	s	CAP, CERAMIC 0.1 10% 50V

CAPACITOR, ELECTROLYTIC

Part No.	SP	Description
1-124-902-00	s	CAP, ELECT 0.47 20% 50V
1-124-791-11	s	CAP, ELECT 1.0 20% 100V
1-124-925-11	s	CAP, ELECT 2.2 20% 100V
1-123-382-00	s	CAP, ELECT 3.3 20% 100V
1-124-927-00	s	CAP, ELECT 4.7 20% 100V
1-123-875-91	s	CAP, ELECT 10 20% 50V
1-124-915-11	s	CAP, ELECT 10 20% 63V
1-124-667-11	s	CAP, ELECT 10 20% 100V
1-124-908-11	s	CAP, ELECT 22 20% 50V
1-124-916-11	s	CAP, ELECT 22 20% 63V
1-124-929-11	s	CAP, ELECT 22 20% 100V
1-124-963-11	s	CAP, ELECT 33 20% 16V
1-124-482-11	s	CAP, ELECT 33 20% 35V
1-124-917-11	s	CAP, ELECT 33 20% 63V
1-124-930-11	s	CAP, ELECT 33 20% 100V
1-124-446-11	s	CAP, ELECT 47 20% 10V
1-124-477-11	s	CAP, ELECT 47 20% 25V
1-124-910-11	s	CAP, ELECT 47 20% 50V
1-124-918-11	s	CAP, ELECT 47 20% 63V
1-124-931-11	s	CAP, ELECT 47 20% 100V

CAPACITOR, ELECTROLYTIC

Part No.	SP	Description
1-124-443-00	s	CAP, ELECT 100 20% 10V
1-126-101-11	s	CAP, ELECT 100 20% 16V
1-124-478-11	s	CAP, ELECT 100 20% 25V
1-124-122-11	s	CAP, ELECT 100 20% 50V
1-124-572-11	s	CAP, ELECT 100 20% 63V
1-123-605-00	s	CAP, ELECT 100 20% 100V
1-124-444-00	s	CAP, ELECT 220 20% 10V
1-124-120-11	s	CAP, ELECT 220 20% 25V
1-124-484-11	s	CAP, ELECT 220 20% 35V
1-124-911-11	s	CAP, ELECT 220 20% 50V
1-124-919-51	s	CAP, ELECT 220 20% 63V
1-124-628-11	s	CAP, ELECT 220 20% 100V
1-124-442-00	s	CAP, ELECT 330 20% 6.3V
1-124-604-00	s	CAP, ELECT 330 20% 10V
1-124-119-00	s	CAP, ELECT 330 20% 16V
1-124-479-11	s	CAP, ELECT 330 20% 25V
1-124-485-11	s	CAP, ELECT 330 20% 35V
1-124-912-11	s	CAP, ELECT 330 20% 50V
1-124-472-11	s	CAP, ELECT 470 20% 10V
1-124-475-11	s	CAP, ELECT 470 20% 16V
1-124-480-11	s	CAP, ELECT 470 20% 25V
1-126-104-11	s	CAP, ELECT 470 20% 35V
1-124-913-11	s	CAP, ELECT 470 20% 50V
1-124-921-11	s	CAP, ELECT 470 20% 63V
1-124-471-00	s	CAP, ELECT 1000 20% 6.3V
1-124-473-11	s	CAP, ELECT 1000 20% 10V
1-124-555-00	s	CAP, ELECT 1000 20% 16V
1-124-557-11	s	CAP, ELECT 1000 20% 25V
1-126-105-11	s	CAP, ELECT 1000 20% 35V
1-124-637-11	s	CAP, ELECT 1000 20% 50V
1-124-922-11	s	CAP, ELECT 1000 20% 63V
1-124-893-11	s	CAP, ELECT 2200 20% 10V
1-124-556-11	s	CAP, ELECT 2200 20% 16V
1-124-563-11	s	CAP, ELECT 2200 20% 25V
1-124-618-11	s	CAP, ELECT 2200 20% 35V

CAPACITOR, ELECTROLYTIC

Part No.	SP	Description
1-124-607-11	s	CAP, ELECT 2200 20% 50V
1-124-621-11	s	CAP, ELECT 3300 20% 6.3V
1-124-887-00	s	CAP, ELECT 3300 20% 16V
1-124-636-00	s	CAP, ELECT 3300 20% 25V
[illegible]-124-762-00	s	CAP, ELECT 4700 20% 10V
1-124-898-11	s	CAP, ELECT 4700 20% 16V
1-124-564-11	s	CAP, ELECT 4700 20% 25V
1-124-891-11	s	CAP, ELECT 10000 20% 6.3V
1-124-763-00	s	CAP, ELECT 10000 20% 10V

CAPACITOR, MICA, SILVERED

Part No.	SP	Description
1-107-019-00	s	CAP, MICA 1.0pF ±0.5pF 500V
1-107-039-00	s	CAP, MICA 1.2pF ±0.5pF 500V
1-107-040-00	s	CAP, MICA 1.5pF ±0.5pF 500V
1-107-041-00	s	CAP, MICA 1.8pF ±0.5pF 500V
1-107-042-00	s	CAP, MICA 2.2pF ±0.5pF 500V
1-107-043-00	s	CAP, MICA 2.7pF ±0.5pF 500V
1-107-044-00	s	CAP, MICA 3.3pF ±0.5pF 500V
1-107-045-00	s	CAP, MICA 3.9pF ±0.5pF 500V
1-107-046-00	s	CAP, MICA 4.7pF ±0.5pF 500V
1-107-026-00	s	CAP, MICA 5.1pF ±0.5pF 500V
1-107-047-00	s	CAP, MICA 5.6pF ±0.5pF 500V
1-107-048-00	s	CAP, MICA 6.8pF ±0.5pF 500V
1-107-049-00	s	CAP, MICA 8.2pF ±0.5pF 500V
1-107-202-00	s	CAP, MICA 10pF 5% 500V
1-107-203-00	s	CAP, MICA 11pF 5% 500V
1-107-204-00	s	CAP, MICA 12pF 5% 500V
1-107-205-00	s	CAP, MICA 13pF 5% 500V
1-107-206-00	s	CAP, MICA 15pF 5% 500V
1-107-207-00	s	CAP, MICA 16pF 5% 500V
1-107-208-00	s	CAP, MICA 18pF 5% 500V
1-107-209-00	s	CAP, MICA 20pF 5% 500V
1-107-210-00	s	CAP, MICA 22pF 5% 500V
1-107-211-00	s	CAP, MICA 24pF 5% 500V
1-107-157-00	s	CAP, MICA 27pF 5% 500V
1-107-158-00	s	CAP, MICA 30pF 5% 500V
1-107-159-00	s	CAP, MICA 33pF 5% 500V
1-107-074-00	s	CAP, MICA 36pF 5% 50V
1-107-075-00	s	CAP, MICA 39pF 5% 50V
1-107-076-00	s	CAP, MICA 43pF 5% 50V
1-107-077-00	s	CAP, MICA 47pF 5% 50V
1-107-164-00	s	CAP, MICA 51pF 5% 500V
1-107-165-00	s	CAP, MICA 56pF 5% 500V
1-107-166-00	s	CAP, MICA 62pF 5% 500V
1-107-036-00	s	CAP, MICA 68pF 5% 500V
1-107-167-00	s	CAP, MICA 75pF 5% 500V
1-107-083-00	s	CAP, MICA 82pF 5% 50V
1-107-084-00	s	CAP, MICA 91pF 5% 50V
1-107-085-00	s	CAP, MICA 100pF 5% 50V
1-107-086-00	s	CAP, MICA 110pF 5% 50V
1-107-087-00	s	CAP, MICA 120pF 5% 50V
1-109-538-00	s	CAP, MICA 130pF 5% 100V
1-109-539-00	s	CAP, MICA 150pF 5% 100V
1-107-090-00	s	CAP, MICA 160pF 5% 50V
1-109-540-00	s	CAP, MICA 180pF 5% 100V
1-109-541-00	s	CAP, MICA 200pF 5% 100V
1-109-542-00	s	CAP, MICA 220pF 5% 100V
1-109-545-00	s	CAP, MICA 270pF 5% 100V
1-109-547-00	s	CAP, MICA 330pF 5% 100V
1-109-549-00	s	CAP, MICA 390pF 5% 100V
1-109-633-00	s	CAP, MICA 470pF 2% 500V
1-109-555-00	s	CAP, MICA 560pF 5% 100V
1-109-635-00	s	CAP, MICA 470pF 2% 500V

RESISTOR, CARBON

Part No.	SP	Description
1-249-381-11	s	RES, CARBON 1.0 5% 1/6W
1-249-382-11	s	RES, CARBON 1.2 5% 1/6W
1-249-383-11	s	RES, CARBON 1.5 5% 1/6W
1-249-384-11	s	RES, CARBON 1.8 5% 1/6W
1-249-385-11	s	RES, CARBON 2.2 5% 1/6W
1-249-386-11	s	RES, CARBON 2.7 5% 1/6W
1-249-387-11	s	RES, CARBON 3.3 5% 1/6W
1-249-388-11	s	RES, CARBON 3.9 5% 1/6W
1-249-389-11	s	RES, CARBON 4.7 5% 1/6W
1-249-390-11	s	RES, CARBON 5.6 5% 1/6W
1-249-391-11	s	RES, CARBON 6.8 5% 1/6W
1-249-392-11	s	RES, CARBON 8.2 5% 1/6W
1-249-393-11	s	RES, CARBON 10 5% 1/6W
1-249-394-11	s	RES, CARBON 12 5% 1/6W
1-249-395-11	s	RES, CARBON 15 5% 1/6W
1-249-396-11	s	RES, CARBON 18 5% 1/6W
1-249-397-11	s	RES, CARBON 22 5% 1/6W
1-249-398-11	s	RES, CARBON 27 5% 1/6W
1-249-399-11	s	RES, CARBON 33 5% 1/6W
1-249-400-11	s	RES, CARBON 39 5% 1/6W
1-249-401-11	s	RES, CARBON 47 5% 1/6W
1-249-402-11	s	RES, CARBON 56 5% 1/6W
1-249-403-11	s	RES, CARBON 68 5% 1/6W
1-215-394-00	s	RES, METAL 75 1% 1/6W
1-249-404-11	s	RES, CARBON 82 5% 1/6W
1-249-405-11	s	RES, CARBON 100 5% 1/6W
1-249-406-11	s	RES, CARBON 120 5% 1/6W
1-249-407-11	s	RES, CARBON 150 5% 1/6W
1-249-408-11	s	RES, CARBON 180 5% 1/6W
1-249-409-11	s	RES, CARBON 220 5% 1/6W
1-249-410-11	s	RES, CARBON 270 5% 1/6W
1-249-411-11	s	RES, CARBON 330 5% 1/6W
1-249-412-11	s	RES, CARBON 390 5% 1/6W
1-249-413-11	s	RES, CARBON 470 5% 1/6W
1-249-414-11	s	RES, CARBON 560 5% 1/6W
1-249-415-11	s	RES, CARBON 680 5% 1/6W
1-249-416-11	s	RES, CARBON 820 5% 1/6W
1-249-417-11	s	RES, CARBON 1.0k 5% 1/6W
1-249-418-11	s	RES, CARBON 1.2k 5% 1/6W
1-249-419-11	s	RES, CARBON 1.5k 5% 1/6W
1-249-420-11	s	RES, CARBON 1.8k 5% 1/6W
1-249-421-11	s	RES, CARBON 2.2k 5% 1/6W
1-249-422-11	s	RES, CARBON 2.7k 5% 1/6W
1-249-423-11	s	RES, CARBON 3.3k 5% 1/6W
1-249-424-11	s	RES, CARBON 3.9k 5% 1/6W
1-249-425-11	s	RES, CARBON 4.7k 5% 1/6W
1-249-426-11	s	RES, CARBON 5.6k 5% 1/6W
1-249-427-11	s	RES, CARBON 6.8k 5% 1/6W
1-249-428-11	s	RES, CARBON 8.2k 5% 1/6W
1-249-429-11	s	RES, CARBON 10k 5% 1/6W
1-249-430-11	s	RES, CARBON 12k 5% 1/6W
1-249-431-11	s	RES, CARBON 15k 5% 1/6W
1-249-432-11	s	RES, CARBON 18k 5% 1/6W
1-249-433-11	s	RES, CARBON 22k 5% 1/6W
1-249-434-11	s	RES, CARBON 27k 5% 1/6W

RESISTOR, CARBON

Part No.	SP	Description
1-249-435-11	s	RES, CARBON 33k 5% 1/6W
1-249-436-11	s	RES, CARBON 39k 5% 1/6W
1-249-437-11	s	RES, CARBON 47k 5% 1/6W
1-249-438-11	s	RES, CARBON 56k 5% 1/6W
1-249-439-11	s	RES, CARBON 68k 5% 1/6W
1-249-440-11	s	RES, CARBON 82k 5% 1/6W
1-249-441-11	s	RES, CARBON 100k 5% 1/6W
1-215-471-00	s	RES, METAL 120k 1% 1/6W
1-215-473-00	s	RES, METAL 150k 1% 1/6W
1-215-475-00	s	RES, METAL 180k 1% 1/6W
1-215-477-00	s	RES, METAL 220k 1% 1/6W
1-215-479-00	s	RES, METAL 270k 1% 1/6W
1-215-481-00	s	RES, METAL 330k 1% 1/6W
1-215-483-00	s	RES, METAL 390k 1% 1/6W
1-215-485-00	s	RES, METAL 470k 1% 1/6W
1-215-487-00	s	RES, METAL 560k 1% 1/6W
1-215-489-00	s	RES, METAL 680k 1% 1/6W
1-215-491-00	s	RES, METAL 820k 1% 1/6W
1-215-493-00	s	RES, METAL 1.0M 1% 1/6W

RESISTOR, METAL

Part No.	SP	Description
1-215-373-31	s	RES, METAL 10 1% 1/6W
1-215-374-00	s	RES, METAL 11 1% 1/6W
1-215-375-00	s	RES, METAL 12 1% 1/6W
1-215-376-00	s	RES, METAL 13 1% 1/6W
1-215-377-00	s	RES, METAL 15 1% 1/6W
1-215-378-00	s	RES, METAL 16 1% 1/6W
1-215-379-00	s	RES, METAL 18 1% 1/6W
1-215-380-00	s	RES, METAL 20 1% 1/6W
1-215-381-00	s	RES, METAL 22 1% 1/6W
1-215-382-00	s	RES, METAL 24 1% 1/6W
1-215-383-00	s	RES, METAL 27 1% 1/6W
1-215-384-00	s	RES, METAL 30 1% 1/6W
1-215-385-00	s	RES, METAL 33 1% 1/6W
1-215-386-00	s	RES, METAL 36 1% 1/6W
1-215-387-00	s	RES, METAL 39 1% 1/6W
1-215-388-00	s	RES, METAL 43 1% 1/6W
1-215-389-00	s	RES, METAL 47 1% 1/6W
1-215-390-00	s	RES, METAL 51 1% 1/6W
1-215-391-00	s	RES, METAL 56 1% 1/6W
1-215-392-00	s	RES, METAL 62 1% 1/6W
1-215-393-00	s	RES, METAL 68 1% 1/6W
1-215-394-00	s	RES, METAL 75 1% 1/6W
1-215-395-00	s	RES, METAL 82 1% 1/6W
1-215-396-00	s	RES, METAL 91 1% 1/6W
1-215-397-00	s	RES, METAL 100 1% 1/6W

RESISTOR, METAL

Part No.	SP	Description
1-215-378-00	s	RES, METAL 16 1% 1/6W
1-215-379-00	s	RES, METAL 18 1% 1/6W
1-215-380-00	s	RES, METAL 20 1% 1/6W
1-215-381-00	s	RES, METAL 22 1% 1/6W
1-215-382-00	s	RES, METAL 24 1% 1/6W
1-215-383-00	s	RES, METAL 27 1% 1/6W
1-215-384-00	s	RES, METAL 30 1% 1/6W
1-215-385-00	s	RES, METAL 33 1% 1/6W
1-215-386-00	s	RES, METAL 36 1% 1/6W
1-215-387-00	s	RES, METAL 39 1% 1/6W
1-215-388-00	s	RES, METAL 43 1% 1/6W
1-215-389-00	s	RES, METAL 47 1% 1/6W
1-215-390-00	s	RES, METAL 51 1% 1/6W
1-215-391-00	s	RES, METAL 56 1% 1/6W
1-215-392-00	s	RES, METAL 62 1% 1/6W
1-215-393-00	s	RES, METAL 68 1% 1/6W
1-215-394-00	s	RES, METAL 75 1% 1/6W
1-215-395-00	s	RES, METAL 82 1% 1/6W
1-215-396-00	s	RES, METAL 91 1% 1/6W
1-215-397-00	s	RES, METAL 100 1% 1/6W
1-215-398-00	s	RES, METAL 110 1% 1/6W
1-215-399-00	s	RES, METAL 120 1% 1/6W
1-215-400-00	s	RES, METAL 130 1% 1/6W
1-215-401-00	s	RES, METAL 150 1% 1/6W
1-215-402-00	s	RES, METAL 160 1% 1/6W
1-215-403-00	s	RES, METAL 180 1% 1/6W
1-215-404-00	s	RES, METAL 200 1% 1/6W
1-215-405-00	s	RES, METAL 220 1% 1/6W
1-215-406-00	s	RES, METAL 240 1% 1/6W
1-215-407-00	s	RES, METAL 270 1% 1/6W
1-215-408-00	s	RES, METAL 300 1% 1/6W
1-215-409-00	s	RES, METAL 330 1% 1/6W
1-215-410-00	s	RES, METAL 360 1% 1/6W
1-215-411-00	s	RES, METAL 390 1% 1/6W
1-215-412-00	s	RES, METAL 430 1% 1/6W
1-215-413-00	s	RES, METAL 470 1% 1/6W
1-215-414-00	s	RES, METAL 510 1% 1/6W
1-215-415-00	s	RES, METAL 560 1% 1/6W
1-215-416-00	s	RES, METAL 620 1% 1/6W
1-215-417-00	s	RES, METAL 680 1% 1/6W
1-215-418-00	s	RES, METAL 750 1% 1/6W
1-215-419-00	s	RES, METAL 820 1% 1/6W
1-215-420-00	s	RES, METAL 910 1% 1/6W
1-215-421-00	s	RES, METAL 1.0k 1% 1/6W
1-215-422-00	s	RES, METAL 1.1k 1% 1/6W
1-215-423-00	s	RES, METAL 1.2k 1% 1/6W
1-215-424-00	s	RES, METAL 1.3k 1% 1/6W
1-215-425-00	s	RES, METAL 1.5k 1% 1/6W
1-215-426-00	s	RES, METAL 1.6k 1% 1/6W
1-215-427-00	s	RES, METAL 1.8k 1% 1/6W

RESISTOR, METAL

Part No.	SP	Description
1-215-428-00	s	RES, METAL 2.0k 1% 1/6W
1-215-429-00	s	RES, METAL 2.2k 1% 1/6W
1-215-430-00	s	RES, METAL 2.4k 1% 1/6W
1-215-431-00	s	RES, METAL 2.7k 1% 1/6W
1-215-432-00	s	RES, METAL 3.0k 1% 1/6W
1-215-433-00	s	RES, METAL 3.3k 1% 1/6W
1-215-434-00	s	RES, METAL 3.6k 1% 1/6W
1-215-435-00	s	RES, METAL 3.9k 1% 1/6W
1-215-436-00	s	RES, METAL 4.3k 1% 1/6W
1-215-437-00	s	RES, METAL 4.7k 1% 1/6W
1-215-438-00	s	RES, METAL 5.1k 1% 1/6W
1-215-439-00	s	RES, METAL 5.6k 1% 1/6W
1-215-440-00	s	RES, METAL 6.2k 1% 1/6W
1-215-441-00	s	RES, METAL 6.8k 1% 1/6W
1-215-442-00	s	RES, METAL 7.5k 1% 1/6W
1-215-443-00	s	RES, METAL 8.2k 1% 1/6W
1-215-444-00	s	RES, METAL 9.1k 1% 1/6W
1-215-445-00	s	RES, METAL 10k 1% 1/6W
1-215-446-00	s	RES, METAL 11k 1% 1/6W
1-215-447-00	s	RES, METAL 12k 1% 1/6W
1-215-448-00	s	RES, METAL 13k 1% 1/6W
1-215-449-00	s	RES, METAL 15k 1% 1/6W
1-215-450-00	s	RES, METAL 16k 1% 1/6W
1-215-451-00	s	RES, METAL 18k 1% 1/6W
1-215-452-00	s	RES, METAL 20k 1% 1/6W
1-215-453-00	s	RES, METAL 22k 1% 1/6W
1-215-454-00	s	RES, METAL 24k 1% 1/6W
1-215-455-00	s	RES, METAL 27k 1% 1/6W
1-215-456-00	s	RES, METAL 30k 1% 1/6W
1-215-457-00	s	RES, METAL 33k 1% 1/6W
1-215-458-00	s	RES, METAL 36k 1% 1/6W
1-215-459-00	s	RES, METAL 39k 1% 1/6W
1-215-460-00	s	RES, METAL 43k 1% 1/6W
1-215-461-00	s	RES, METAL 47k 1% 1/6W
1-215-462-00	s	RES, METAL 51k 1% 1/6W
1-215-463-00	s	RES, METAL 56k 1% 1/6W
1-215-464-00	s	RES, METAL 62k 1% 1/6W
1-215-465-00	s	RES, METAL 68k 1% 1/6W
1-215-466-00	s	RES, METAL 75k 1% 1/6W
1-215-467-00	s	RES, METAL 82k 1% 1/6W
1-215-468-00	s	RES, METAL 91k 1% 1/6W
1-215-469-00	s	RES, METAL 100k 1% 1/6W
1-215-470-00	s	RES, METAL 110k 1% 1/6W
1-215-471-00	s	RES, METAL 120k 1% 1/6W
1-215-472-00	s	RES, METAL 130k 1% 1/6W
1-215-473-00	s	RES, METAL 150k 1% 1/6W
1-215-474-00	s	RES, METAL 160k 1% 1/6W
1-215-475-00	s	RES, METAL 180k 1% 1/6W
1-215-476-00	s	RES, METAL 200k 1% 1/6W
1-215-477-00	s	RES, METAL 220k 1% 1/6W
1-215-478-00	s	RES, METAL 240k 1% 1/6W
1-215-479-00	s	RES, METAL 270k 1% 1/6W
1-215-480-00	s	RES, METAL 300k 1% 1/6W
1-215-481-00	s	RES, METAL 330k 1% 1/6W
1-215-482-00	s	RES, METAL 360k 1% 1/6W
1-215-483-00	s	RES, METAL 390k 1% 1/6W
1-215-484-00	s	RES, METAL 430k 1% 1/6W
1-215-485-00	s	RES, METAL 470k 1% 1/6W
1-215-486-00	s	RES, METAL 510k 1% 1/6W
1-215-487-00	s	RES, METAL 560k 1% 1/6W
1-215-488-00	s	RES, METAL 620k 1% 1/6W
1-215-489-00	s	RES, METAL 680k 1% 1/6W
1-215-490-00	s	RES, METAL 750k 1% 1/6W
1-215-491-00	s	RES, METAL 820k 1% 1/6W
1-215-492-00	s	RES, METAL 910k 1% 1/6W
1-215-493-00	s	RES, METAL 1.0M 1% 1/6W

CONNECTOR

Part No.	SP	Description
1-564-001-11	o	RECEPTACLE 2P MALE (STRAIGHT TYPE)
1-564-012-11	o	RECEPTACLE 2P MALE (ANGLE TYPE)
1-562-147-11	o	HOUSING 2P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32
1-564-002-11	o	RECEPTACLE 3P MALE (STRAIGHT TYPE)
1-564-013-11	o	RECEPTACLE 3P MALE (ANGLE TYPE)
1-562-148-11	o	HOUSING 3P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32
1-564-003-11	o	RECEPTACLE 4P MALE (STRAIGHT TYPE)
1-564-014-11	o	RECEPTACLE 4P MALE (ANGLE TYPE)
1-562-149-11	o	HOUSING 4P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32
1-564-004-11	o	RECEPTACLE 5P MALE (STRAIGHT TYPE)
1-564-015-11	o	RECEPTACLE 5P MALE (ANGLE TYPE)
1-562-150-11	o	HOUSING 5P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32
1-564-005-11	o	RECEPTACLE 6P MALE (STRAIGHT TYPE)
1-564-016-11	o	RECEPTACLE 6P MALE (ANGLE TYPE)
1-562-151-11	o	HOUSING 6P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32
1-564-006-11	o	RECEPTACLE 7P MALE (STRAIGHT TYPE)
1-564-017-11	o	RECEPTACLE 7P MALE (ANGLE TYPE)
1-562-152-11	o	HOUSING 7P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32
1-564-007-11	o	RECEPTACLE 8P MALE (STRAIGHT TYPE)
1-564-018-11	o	RECEPTACLE 8P MALE (ANGLE TYPE)
1-562-153-11	o	HOUSING 8P
1-564-026-21	o	CONTACT AWG24-30
1-564-681-21	o	CONTACT AWG32

Part No.	SP	Description	
CONNECTOR			
1-564-008-41	o	RECEPTACLE	9P MALE (STRAIGHT TYPE)
1-564-019-11	o	RECEPTACLE	9P MALE (ANGLE TYPE)
1-562-154-11	o	HOUSING	9P
1-564-026-21	o	CONTACT	AWG24-30
1-564-681-21	o	CONTACT	AWG32
1-564-009-11	o	RECEPTACLE	10P MALE (STRAIGHT TYPE)
1-564-020-11	o	RECEPTACLE	10P MALE (ANGLE TYPE)
1-562-155-11	o	HOUSING	10P
1-564-026-21	o	CONTACT	AWG24-30
1-564-681-21	o	CONTACT	AWG32
1-564-010-21	o	RECEPTACLE	11P MALE (STRAIGHT TYPE)
1-564-021-11	o	RECEPTACLE	11P MALE (ANGLE TYPE)
1-562-156-11	o	HOUSING	11P
1-564-026-21	o	CONTACT	AWG24-30
1-564-681-21	o	CONTACT	AWG32
1-564-011-11	o	RECEPTACLE	12P MALE (STRAIGHT TYPE)
1-564-022-11	o	RECEPTACLE	12P MALE (ANGLE TYPE)
1-562-157-11	o	HOUSING	12P
1-564-026-21	o	CONTACT	AWG24-30
1-564-681-21	o	CONTACT	AWG32
1-564-683-11	o	RECEPTACLE	13P MALE (STRAIGHT TYPE)
1-564-743-11	o	RECEPTACLE	13P MALE (ANGLE TYPE)
1-562-627-11	o	HOUSING	13P
1-564-026-21	o	CONTACT	AWG24-30
1-564-681-21	o	CONTACT	AWG32
1-564-069-11	o	RECEPTACLE	14P MALE (STRAIGHT TYPE)
1-564-630-11	o	RECEPTACLE	14P MALE (ANGLE TYPE)
1-562-185-11	o	HOUSING	14P
1-564-026-21	o	CONTACT	AWG24-30
1-564-681-21	o	CONTACT	AWG32
1-564-855-11	o	RECEPTACLE	15P MALE (STRAIGHT TYPE)
1-564-877-11	o	RECEPTACLE	15P MALE (ANGLE TYPE)
1-562-958-11	o	HOUSING	15P
1-564-026-21	o	CONTACT	AWG24-30
1-564-681-21	o	CONTACT	AWG32

CN-249 BOARD

All of the component parts on the CN-249 board are supplied together when you order IF-167 board.

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-6268-231-A	o	MOUNTED CIRCUIT BOARD, CN-249
4pc	1-563-354-11	s	BNC
L501	1-408-417-21	s	MICRO INDUCTOR (LF-8S)
Q501	8-729-178-54	s	2SC2785-F
Q502	8-729-178-54	s	2SC2785-F
S501	1-554-883-11	s	SWITCH, SLIDE
S502	1-554-150-00	s	SWITCH, DIP
S503	1-554-150-00	s	SWITCH, DIP
S504	1-570-145-11	s	SWITCH, DIP

DET-3 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	1-618-489-11	o	PRINTED CIRCUIT BOARD, DET-3
C1	1-102-074-00	s	CERAMIC, 0.001MF 10% 50V
C2	1-126-154-11	s	ELECT, 47MF 20% 6.3V
D1	8-719-200-02	s	10E-2
DME1	8-745-211-00	s	DME DM-211
IC1	8-759-103-93	s	UPC393C
RV1	1-228-469-00	s	VAR, CERMET 200
RV2	1-228-469-00	s	VAR, CERMET 200

DP-77 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	1-627-384-11	o	PRINTED CIRCUIT BOARD, DP-77
1pc	1-506-819-11	s	HOUSING,BOARD IN 10P
1pc	1-506-820-11	s	HOUSING,BOARD IN 11P
D1	8-719-942-19	s	LB-402VK
D2	8-719-942-19	s	LB-402VK
D3	8-719-942-19	s	LB-402VK
D4	8-719-942-19	s	LB-402VK
D5	8-719-908-50	s	SLR-54MC3
D6	8-719-911-19	s	1SS119
S1	1-552-539-00	s	SWITCH, KEY BOARD

IF-167 BOARD

This board includs the CN-249 board.

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-6259-342-B	o	MOUNTED CIRCUIT BOARD, IF-167
C12	1-130-487-00	s	MYLAR, 0.022MF 5% 50V
C13	1-102-114-00	s	CERAMIC, 470PF 10% 50V
C16	1-109-621-00	s	MICA, 220PF 1% 500V
C17	1-126-154-11	s	ELECT, 47MF 20% 6.3V
C19	1-109-626-00	s	MICA, 100PF 1% 500V
C29	1-102-114-00	s	CERAMIC, 470PF 10% 50V
C32	1-130-491-00	s	MYLAR, 0.047MF 5% 50V
C34	1-130-489-00	s	MYLAR, 0.033MF 5% 50V
C35	1-131-345-00	s	TANTALUM 0.47MF 10% 35V
C36	1-109-626-00	s	MICA, 100PF 1% 500V
C37	1-130-483-00	s	MYLAR, 0.01MF 5% 50V
C46	1-130-471-00	s	MYLAR, 0.001MF 5% 50V
C48	1-130-471-00	s	MYLAR, 0.001MF 5% 50V
C50	1-130-471-00	s	MYLAR, 0.001MF 5% 50V
C52	1-130-471-00	s	MYLAR, 0.001MF 5% 50V
C53	1-130-471-00	s	MYLAR, 0.001MF 5% 50V
C62	1-162-888-11	s	CERAMIC, 560PF 5% 50V
C63	1-162-888-11	s	CERAMIC, 560PF 5% 50V
C87	1-162-720-11	s	CERAMIC, 270PF 5% 50V
C91	1-162-720-11	s	CERAMIC, 270PF 5% 50V
C137	1-123-611-00	s	ELECT, 1MF 20% 50V
C138	1-123-611-00	s	ELECT, 1MF 20% 50V
C141	1-123-611-00	s	ELECT, 1MF 20% 50V
C142	1-123-611-00	s	ELECT, 1MF 20% 50V
C146	1-123-611-00	s	ELECT, 1MF 20% 50V
C154	1-123-611-00	s	ELECT, 1MF 20% 50V
C155	1-123-611-00	s	ELECT, 1MF 20% 50V
C156	1-123-611-00	s	ELECT, 1MF 20% 50V
C157	1-123-611-00	s	ELECT, 1MF 20% 50V
C158	1-123-611-00	s	ELECT, 1MF 20% 50V
C159	1-123-611-00	s	ELECT, 1MF 20% 50V
C160	1-123-611-00	s	ELECT, 1MF 20% 50V
C161	1-123-611-00	s	ELECT, 1MF 20% 50V
C162	1-123-611-00	s	ELECT, 1MF 20% 50V
C163	1-130-471-00	s	MYLAR, 0.001MF 5% 50V
C164	1-102-106-00	s	CERAMIC, 100PF 10% 50V
C165	1-102-106-00	s	CERAMIC, 100PF 10% 50V
C166	1-102-106-00	s	CERAMIC, 100PF 10% 50V
C167	1-102-106-00	s	CERAMIC, 100PF 10% 50V
C168	1-102-106-00	s	CERAMIC, 100PF 10% 50V
C169	1-102-106-00	s	CERAMIC, 100PF 10% 50V
C170	1-102-106-00	s	CERAMIC, 100PF 10% 50V
C171	1-102-106-00	s	CERAMIC, 100PF 10% 50V
C172	1-102-106-00	s	CERAMIC, 100PF 10% 50V
C173	1-102-106-00	s	CERAMIC, 100PF 10% 50V
C174	1-102-106-00	s	CERAMIC, 100PF 10% 50V
C175	1-102-106-00	s	CERAMIC, 100PF 10% 50V
CN1	1-506-747-11	s	PIN, DIN (DIP) 64P
CN2	1-506-745-11	s	PIN, DIN (DIP) 32P
CN3	1-563-323-11	s	D-SUB(MOUNT TYPE)9P
CN4	1-563-323-11	s	D-SUB(MOUNT TYPE)9P
CN5	1-563-323-11	s	D-SUB(MOUNT TYPE)9P

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Part List".

Ref. No. or Q'ty	Part No.	SP	Description
CN7	1-506-796-11	s	D-SUB 15P
CN8	1-560-023-00	o	PIN, 26P
CN13	1-563-322-11	s	D-SUB(MOUNT TYPE)25P
D1	8-719-911-19	s	1SS119
D2	8-719-920-05	s	TLG123A
D3	8-719-920-05	s	TLG123A
D4	8-719-911-19	s	1SS119
D5	8-719-911-19	s	1SS119
D6	8-719-911-19	s	1SS119
IC1	8-759-916-82	s	LH0082AD
IC2	8-759-202-82	s	TC74HC85P
IC3	8-759-203-50	s	TC74HC574P
IC4	8-759-000-xx	s	TC74HC74P
IC5	8-759-203-50	s	TC74HC574P
IC6	8-759-202-82	s	TC74HC85P
IC7	8-759-916-80	s	LH0080A
IC8	8-759-202-24	s	TC74HC86P
IC9	8-759-916-82	s	LH0082AD
IC10	8-759-045-38	s	MC14538BCP
IC11	8-759-202-11	s	TC74HC00P
IC12	8-759-926-30	s	AM26LS30PC
IC13	8-759-916-84	s	LH0084A
IC14	8-759-916-80	s	LH0080A
IC15	8-759-007-10	s	MC74HC541N
IC16	8-759-007-10	s	MC74HC541N
IC17	8-759-916-84	s	LH0084A
IC18	8-759-040-01	s	MC14001BCP
IC19	8-759-045-38	s	MC14538BCP
IC20	8-759-729-03	s	NJM2903D
IC21	8-759-011-71	s	AM26LS32PC
IC22	8-759-912-03	s	SN74ALS138N
IC23	8-759-203-50	s	TC74HC574P
IC24	8-759-007-10	s	MC74HC541N
IC25	8-759-007-10	s	MC74HC541N
IC26	8-759-203-50	s	TC74HC574P
IC27	8-759-912-03	s	SN74ALS138N
IC28	8-759-045-38	s	MC14538BCP
IC29	8-759-000-51	s	MC14069BCP
IC30	8-759-045-38	s	MC14538BCP
IC31	8-759-926-30	s	AM26LS30PC
IC32	8-759-772-73	s	27128-904M015V102A3B
IC33	8-752-321-00	s	CXK5816PN-12L
IC34	8-759-202-74	s	TC74HC04P
IC35	8-752-321-00	s	CXK5816PN-12L
IC36	8-759-772-73	s	27128-904M015V102A3B
IC37	8-759-203-40	s	TC74HC393P
IC38	8-759-007-10	s	MC74HC541N
IC39	8-759-912-03	s	SN74ALS138N
IC40	8-759-000-xx	s	TC74HC74P
IC41	8-759-600-61	s	M54529AP
IC42	8-759-916-13	s	SN74HC03N
IC43	8-759-000-xx	s	TC74HC74P
IC44	8-759-202-89	s	TC74HC139P
IC45	8-759-202-20	s	TC74HC27P
IC46	8-759-000-xx	s	TC74HC74P
IC47	8-759-916-13	s	SN74HC03N
IC48	8-759-007-10	s	MC74HC541N
IC49	8-759-202-56	s	TC74HC245P
IC50	8-759-202-56	s	TC74HC245P
IC51	8-759-007-10	s	MC74HC541N
IC52	8-759-700-69	s	NJM79L12A
IC53	8-759-700-68	s	NJM79L09A
IC54	8-759-708-09	s	NJM78L09A
IC55	8-759-202-27	s	TC74HC157P
IC56	8-759-202-12	s	TC74HC02P
IC57	8-759-202-74	s	TC74HC04P
IC58	8-759-202-74	s	TC74HC04P
IC59	8-759-202-12	s	TC74HC02P
IC60	8-759-202-27	s	TC74HC157P
IC61	8-759-001-42	s	MC74HC174N
IC62	8-759-203-21	s	TC74HC273P
IC63	8-759-203-21	s	TC74HC273P
IC64	8-759-007-10	s	MC74HC541N
IC65	8-759-916-79	s	SN74HC273N
IC66	8-759-916-79	s	SN74HC273N
IC67	8-759-007-10	s	MC74HC541N
IC68	8-759-202-27	s	TC74HC157P
IC69	8-752-321-00	s	CXK5816PN-12L
IC70	8-759-202-27	s	TC74HC157P
IC71	8-759-202-27	s	TC74HC157P
IC72	8-752-321-00	s	CXK5816PN-12L
IC73	8-759-202-27	s	TC74HC157P
IC74	8-759-001-42	s	MC74HC174N
IC75	8-759-201-41	s	TD62901P
IC76	8-759-203-21	s	TC74HC273P
IC77	8-759-007-10	s	MC74HC541N
IC78	8-759-203-21	s	TC74HC273P
IC79	8-759-914-03	s	SN74LS06N
IC80	8-759-007-10	s	MC74HC541N
IC81	8-759-202-27	s	TC74HC157P
IC82	8-759-202-56	s	TC74HC245P
IC83	8-759-202-56	s	TC74HC245P
IC84	8-759-202-56	s	TC74HC245P
IC85	8-759-202-56	s	TC74HC245P
IC86	8-759-202-27	s	TC74HC157P
IC87	8-759-250-20	s	TC5020BP
IC88	8-759-145-58	s	uPC4558C
IC89	8-759-201-41	s	TD62901P
IC90	8-759-951-89	s	SN75189AN
IC91	8-759-007-10	s	MC74HC541N
IC92	8-759-202-74	s	TC74HC04P
IC93	8-759-202-76	s	TC74HC30P
IC94	8-759-007-10	s	MC74HC541N
IC95	8-759-202-12	s	TC74HC02P
IC96	8-759-202-21	s	TC74HC32P
IC97	8-759-202-25	s	TC74HC133P
IC98	8-759-000-47	s	MC14051BCP
IC99	8-759-000-47	s	MC14051BCP
IC100	8-759-145-58	s	uPC4558C
IC101	8-759-145-58	s	uPC4558C
IC102	8-759-145-58	s	uPC4558C
IC104	8-759-914-03	s	SN74LS06N
L1	1-421-459-00	s	COIL, CHOKE
L2	1-421-459-00	s	COIL, CHOKE
L3	1-421-459-00	s	COIL, CHOKE
PS1	1-532-679-11	s	LINK, IC
PS2	1-532-679-11	s	LINK, IC
PS3	1-532-675-21	s	LINK, IC

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Part List".

Ref. No. or Q'ty	Part No.	SP	Description
Q2	8-729-117-54	s	2SA1175-F
Q3	8-729-117-54	s	2SA1175-F
Q4	8-729-117-54	s	2SA1175-F
RB1	1-231-533-00	s	RESISTOR BLOCK 10KX4
RB2	1-231-410-00	s	RESISTOR BLOCK 10K
RB3	1-231-533-00	s	RESISTOR BLOCK 10KX4
RB4	1-231-410-00	s	RESISTOR BLOCK 10K
RB5	1-231-385-00	s	RESISTOR BLOCK 4.7K
RB6	1-231-533-00	s	RESISTOR BLOCK 10KX4
RB7	1-231-385-00	s	RESISTOR BLOCK 4.7K
RB8	1-231-533-00	s	RESISTOR BLOCK 10KX4
RB9	1-231-533-00	s	RESISTOR BLOCK 10KX4
RB10	1-231-533-00	s	RESISTOR BLOCK 10KX4
RB11	1-231-533-00	s	RESISTOR BLOCK 10KX4
RB12	1-231-411-00	s	RESISTOR BLOCK 100K
RB13	1-231-385-00	s	RESISTOR BLOCK 4.7K
RB14	1-231-410-00	s	RESISTOR BLOCK 10K
RB15	1-231-410-00	s	RESISTOR BLOCK 10K
RB16	1-231-525-00	s	RESISTOR BLOCK 4.7KX4
RB17	1-231-525-00	s	RESISTOR BLOCK 4.7KX4
RB18	1-231-410-00	s	RESISTOR BLOCK 10K
RB19	1-231-410-00	s	RESISTOR BLOCK 10K
RB20	1-231-533-00	s	RESISTOR BLOCK 10KX4
RB21	1-231-410-00	s	RESISTOR BLOCK 10K
RB22	1-231-525-00	s	RESISTOR BLOCK 4.7KX4
RB23	1-231-385-00	s	RESISTOR BLOCK 4.7K
RB24	1-231-385-00	s	RESISTOR BLOCK 4.7K
RB25	1-231-385-00	s	RESISTOR BLOCK 4.7K
RB26	1-231-385-00	s	RESISTOR BLOCK 4.7K
RB27	1-231-385-00	s	RESISTOR BLOCK 4.7K
RV1	1-228-457-00	s	VAR, CERMET 2K
RV2	1-228-455-00	s	VAR, CERMET 500
RV3	1-228-457-00	s	VAR, CERMET 2K
RV4	1-228-455-00	s	VAR, CERMET 500
S1	1-570-598-11	s	SWITCH, DIP
S2	1-570-598-11	s	SWITCH, DIP
S3	1-570-623-11	s	SWITCH, DIP (for suffix -22)
	1-570-598-11	s	SWITCH, DIP (for suffix -12)
S4	1-554-295-00	s	SWITCH, SLIDE
S5	1-554-295-00	s	SWITCH, SLIDE
X1	1-527-822-00	s	OSCILLATOR, CERAMIC

MB-163 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-6268-235-A	o	MOUNTED CIRCUIT BOARD, MB-163
CN201	1-564-243-00	o	PIN, 6P
CN202	1-564-915-11	o	PIN, 7P
CN203	1-563-337-11	o	HOUSING, (DIP) 96P
CN204	1-563-334-11	o	HOUSING, (DIP) 32P
CN205	1-563-336-11	o	HOUSING, (DIP) 64P
CN206	1-563-336-11	o	HOUSING, (DIP) 64P
CN207	1-563-336-11	o	HOUSING, (DIP) 64P
CN208	1-563-334-11	o	HOUSING, (DIP) 32P
CN209	1-563-336-11	o	HOUSING, (DIP) 64P
CN210	1-563-336-11	o	HOUSING, (DIP) 64P
CN211	1-563-334-11	o	HOUSING, (DIP) 32P
CN212	1-563-336-11	o	HOUSING, (DIP) 64P
CN213	1-563-336-11	o	HOUSING, (DIP) 64P
CN214	1-563-336-11	o	HOUSING, (DIP) 64P

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Part List".

SY-113 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-6259-343-B	o	MOUNTED CIRCUIT BOARD, SY-113
BT1	1-528-096-21	s	BATTERY, CADMIUM, NICKEL
BZ1	1-529-055-11	s	BUZZER
C17	1-102-113-00	s	CERAMIC, 390PF 10% 50V
C20	1-102-114-00	s	CERAMIC, 470PF 10% 50V
C21	1-102-114-00	s	CERAMIC, 470PF 10% 50V
C39	1-102-106-00	s	CERAMIC, 100PF 10% 50V
C49	1-102-106-00	s	CERAMIC, 100PF 10% 50V
C65	1-130-471-00	s	MYLAR, 0.001MF 5% 50V
C94	1-102-106-00	s	CERAMIC, 100PF 10% 50V
C112	1-102-113-00	s	CERAMIC, 390PF 10% 50V
C131	1-130-495-00	s	MYLAR, 0.1MF 5% 50V
C134	1-102-106-00	s	CERAMIC, 100PF 10% 50V
C136	1-102-114-00	s	CERAMIC, 470PF 10% 50V
C137	1-102-114-00	s	CERAMIC, 470PF 10% 50V
C140	1-102-074-00	s	CERAMIC, 0.001MF 10% 50V
C141	1-101-880-00	s	CERAMIC, 47PF 10% 50V
C142	1-102-074-00	s	CERAMIC, 0.001MF 10% 50V
C143	1-102-074-00	s	CERAMIC, 0.001MF 10% 50V
C144	1-102-074-00	s	CERAMIC, 0.001MF 10% 50V
C145	1-102-074-00	s	CERAMIC, 0.001MF 10% 50V
CN101	1-506-748-11	s	PIN, DIN DIP 96P
CN102	1-506-695-11	s	HEADER 34P
CN103	1-506-695-11	s	HEADER 34P
D1	8-719-982-04	s	ERB81-004
D2	8-719-982-04	s	ERB81-004
D3	8-719-982-04	s	ERB81-004
IC1	8-759-202-13	s	TC74HUC04P
IC2	8-759-202-11	s	TC74HC00P
IC3	8-759-645-19	s	M54519P
IC4	8-759-007-10	s	MC74HC541N
IC5	8-759-209-05	s	TMP82C79P-2
IC6	8-759-007-10	s	MC74HC541N
IC7	8-759-202-74	s	TC74HC04P
IC8	8-759-000-xx	s	TC74HC74P
IC9	8-759-000-xx	s	TC74HC74P
IC10	8-759-202-32	s	TC74HC163P
IC11	8-759-684-78	s	M58478P
IC12	8-759-040-11	s	MC14011BCP
IC13	8-759-040-70	s	MC14070BCP
IC14	8-759-600-68	s	M54562P
IC15	8-759-203-10	s	TC74HC238P
IC16	8-759-929-34	s	X2804AP
IC17	8-759-007-10	s	MC74HC541N
IC18	8-759-007-10	s	MC74HC541N
IC19	8-759-202-26	s	TC74HC138P
IC20	8-759-202-26	s	TC74HC138P
IC21	8-759-202-21	s	TC74HC32P
IC22	8-759-040-70	s	MC14070BCP
IC23	8-759-040-01	s	MC14001BCP
IC24	8-759-645-19	s	M54519P
IC25	8-759-007-10	s	MC74HC541N

Ref. No. or Q'ty	Part No.	SP	Description
IC26	8-759-209-05	s	TMP82C79P-2
IC27	8-759-916-82	s	LH0082AD
IC28	8-759-916-82	s	LH0082AD
IC29	8-759-916-82	s	LH0082AD
IC30	8-759-916-82	s	LH0082AD
IC31	8-759-007-10	s	MC74HC541N
IC32	8-759-202-26	s	TC74HC138P
IC33	8-759-203-10	s	TC74HC238P
IC34	8-759-007-09	s	MC74HC540N
IC35	8-759-007-10	s	MC74HC541N
IC36	8-759-600-68	s	M54562P
IC37	8-759-203-10	s	TC74HC238P
IC38	8-759-645-19	s	M54519P
IC39	8-759-007-10	s	MC74HC541N
IC40	8-759-209-05	s	TMP82C79P-2
IC41	8-759-916-84	s	LH0084A
IC42	8-759-202-92	s	TC74HC151P
IC43	8-759-203-40	s	TC74HC393P
IC44	8-759-202-89	s	TC74HC139P
IC45	8-759-202-XX	s	TC74HC173P
IC46	8-759-202-XX	s	TC74HC173P
IC47	8-759-209-05	s	TMP82C79P-2
IC48	8-759-007-10	s	MC74HC541N
IC49	8-759-600-68	s	M54562P
IC50	8-759-600-68	s	M54562P
IC51	8-759-203-10	s	TC74HC238P
IC52	8-759-202-16	s	TC74HC11P
IC53	8-759-203-10	s	TC74HC238P
IC54	8-759-001-39	s	MC74HC164N
IC55	8-759-001-39	s	MC74HC164N
IC56	8-759-202-12	s	TC74HC02P
IC57	8-759-203-01	s	TC74HC175P
IC58	8-759-645-19	s	M54519P
IC59	8-759-645-19	s	M54519P
IC60	8-759-040-01	s	MC1400BCP
IC61	8-759-007-10	s	MC74HC541N
IC62	8-759-007-10	s	MC74HC541N
IC63	8-759-912-21	s	SN74ALS245AN
IC64	8-759-912-21	s	SN74ALS245AN
IC65	8-759-202-16	s	TC74HC11P
IC66	8-759-202-15	s	TC74HC10P
IC67	8-759-203-76	s	TC74HC4078P
IC68	8-759-202-11	s	TC74HC00P
IC69	8-759-202-14	s	TC74HC08P
IC70	8-759-202-89	s	TC74HC139P
IC71	8-759-209-05	s	TMP82C79P-2
IC72	8-759-203-10	s	TC74HC238P
IC73	8-759-007-10	s	MC74HC541N
IC74	8-759-203-05	s	TC74HC193P
IC75	8-759-912-21	s	SN74ALS245AN
IC76	8-759-912-21	s	SN74ALS245AN
IC77	8-759-007-35	s	MC68000P8
IC78	8-759-912-21	s	SN74ALS245AN
IC79	8-759-202-11	s	TC74HC00P
IC80	8-759-202-21	s	TC74HC32P
IC81	8-759-202-14	s	TC74HC08P
IC82	8-759-007-10	s	MC74HC541N
IC83	8-759-007-09	s	MC74HC540N
IC84	8-759-951-50	s	SN75150P
IC85	8-759-202-32	s	TC74HC163P
IC86	8-759-203-33	s	TC74HC367P
IC87	8-759-974-07	s	SN7407N
IC88	8-759-912-21	s	SN74ALS245AN
IC89	8-759-111-49	s	UPD43256C-12L
IC90	8-759-702-56	s	HN27C301G-E600M1V200 (for suffix -22)
	8-759-706-48	s	UPD27C512-E600M1V105 (for suffix -12)
IC91	8-759-702-58	s	HN27C301G-E600M3V200 (for suffix -22)
	8-759-706-50	s	UPD27C512-E600M3V105 (for suffix -12)
IC92	8-759-645-19	s	M54519P
IC93	8-759-600-68	s	M54562P
IC94	8-759-202-17	s	TC74HC14P
IC96	8-759-202-90	s	TC74HC147P
IC97	8-759-007-10	s	MC74HC541N
IC98	8-759-111-49	s	UPD43256C-12L
IC99	8-759-702-55	s	HN27C301G-E600M0V200 (for suffix -22)
	8-759-706-47	s	UPD27C512-E600M0V105 (for suffix -12)
IC100	8-759-702-57	s	HN27C301G-E600M2V200 (for suffix -22)
	8-759-706-49	s	UPD27C512-E600M2V105 (for suffix -12)
IC101	8-759-202-74	s	TC74HC04P
IC102	8-759-202-21	s	TC74HC32P
IC103	8-759-007-10	s	MC74HC541N
IC104	8-759-007-10	s	MC74HC541N
IC105	8-759-007-10	s	MC74HC541N
IC106	8-759-007-10	s	MC74HC541N
IC107	8-759-202-18	s	TC74HC20P
IC108	8-759-202-26	s	TC74HC138P
IC109	8-759-202-76	s	TC74HC30P
IC110	8-759-040-11	s	MC14011BCP
IC111	8-759-000-xx	s	TC74HC74P
IC112	8-759-700-69	s	NJM79L12A
IC113	8-759-178-12	s	uPC78L12
IC114	8-759-700-06	s	NJM7812B
IC115	8-759-908-35	s	TL7705CP-B
IC116	8-759-982-65	s	ICL7665SCPA
IC117	8-759-700-06	s	NJM7812B
L1	1-421-459-00	s	COIL, CHOKE
L2	1-421-459-00	s	COIL, CHOKE
L3	1-421-459-00	s	COIL, CHOKE
PS1(ICP)	1-532-675-21	s	LINK, IC
PS2(ICP)	1-532-637-11	s	LINK, IC
PS3(ICP)	1-532-637-11	s	LINK, IC
Q1	8-729-178-54	s	2SC2785-F
Q2	8-729-177-43	s	2SD774-4
RB1	1-231-385-00	s	RESISTOR BLOCK 4.7K
RB2	1-231-385-00	s	RESISTOR BLOCK 4.7K
RB3	1-231-385-00	s	RESISTOR BLOCK 4.7K
RB4	1-231-385-00	s	RESISTOR BLOCK 4.7K
RB5	1-231-385-00	s	RESISTOR BLOCK 4.7K

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Part List".

Ref. No. or Q'ty	Part No.	SP	Description
RB6	1-231-385-00	s	RESISTOR BLOCK 4.7K
RB7	1-231-385-00	s	RESISTOR BLOCK 4.7K
RB8	1-231-385-00	s	RESISTOR BLOCK 4.7K
RB9	1-231-385-00	s	RESISTOR BLOCK 4.7K
RB10	1-231-385-00	s	RESISTOR BLOCK 4.7K
RB11	1-231-385-00	s	RESISTOR BLOCK 4.7K
RB12	1-231-385-00	s	RESISTOR BLOCK 4.7K
RB13	1-231-385-00	s	RESISTOR BLOCK 4.7K
RB14	1-231-385-00	s	RESISTOR BLOCK 4.7K
RB15	1-231-525-00	s	RESISTOR BLOCK 4.7KX4
RB16	1-231-385-00	s	RESISTOR BLOCK 4.7K
RB17	1-231-385-00	s	RESISTOR BLOCK 4.7K
RB18	1-231-405-00	s	RESISTOR BLOCK 1K
RB19	1-231-385-00	s	RESISTOR BLOCK 4.7K
RB20	1-231-385-00	s	RESISTOR BLOCK 4.7K
RB21	1-231-385-00	s	RESISTOR BLOCK 4.7K
RV1	1-228-995-00	s	VAR, METAL GLAZE 22K
S1	1-553-219-00	s	SWITCH, PUSH
S2	1-552-509-00	s	SWITCH, DIP
S3	1-570-623-11	s	SWITCH, DIP
X1	1-567-149-00	s	OSCILLATOR, CRYSTAL
X2	1-527-227-00	s	OSCILLATOR, CRYSTAL
X3	1-567-504-11	s	CRYSTAL, OSC

SW-231 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-6267-137-A	o	MOUNTED CIRCUIT BOARD, SW-231
C1	1-124-589-11	s	ELECT, 47MF 20% 16V
C2	1-124-589-11	s	ELECT, 47MF 20% 16V
C3	1-161-494-00	s	CERAMIC, 0.022MF 25V
C4	1-161-494-00	s	CERAMIC, 0.022MF 25V
C5	1-124-589-11	s	ELECT, 47MF 20% 16V
C6	1-161-494-00	s	CERAMIC, 0.022MF 25V
C7	1-124-589-11	s	ELECT, 47MF 20% 16V
C8	1-161-494-00	s	CERAMIC, 0.022MF 25V
C9	1-162-901-11	s	CERAMIC, 0.1MF 10% 50V
C10	1-161-494-00	s	CERAMIC, 0.022MF 25V
C11	1-161-494-00	s	CERAMIC, 0.022MF 25V
C12	1-161-494-00	s	CERAMIC, 0.022MF 25V
C13	1-161-494-00	s	CERAMIC, 0.022MF 25V
C14	1-161-494-00	s	CERAMIC, 0.022MF 25V
C15	1-124-589-11	s	ELECT, 47MF 20% 16V
D3	8-719-911-19	s	1SS119
D4	8-719-911-19	s	1SS119
D5	8-719-911-19	s	1SS119
D6	8-719-911-19	s	1SS119
D302	8-719-911-19	s	1SS119
D303	8-719-911-19	s	1SS119
D304	8-719-911-19	s	1SS119
D305	8-719-911-19	s	1SS119
D306	8-719-921-01	s	SLR-54VC3
D307	8-719-921-01	s	SLR-54VC3
IC1	8-759-990-84	s	TL084CN
Q1	8-729-117-54	s	2SC1175
Q2	8-729-117-54	s	2SC1175
Q3	8-729-178-55	s	2SC2785-E
Q4	8-729-178-55	s	2SC2785-E
Q5	8-729-117-54	s	2SC1175
Q6	8-729-117-54	s	2SC1175
Q7	8-729-178-55	s	2SC2785-E
Q8	8-729-178-55	s	2SC2785-E
RV1	1-230-137-00	s	VAR, CARBON 5K
RV2	1-230-137-00	s	VAR, CARBON 5K
RV3	1-230-137-00	s	VAR, CARBON 5K
RV4	1-230-137-00	s	VAR, CARBON 5K
RV5	1-230-137-00	s	VAR, CARBON 5K
S1	1-516-995-00	s	SWITCH, LEVER SLIDE
S2	1-516-995-00	s	SWITCH, LEVER SLIDE
S301	1-552-570-00	s	SWITCH, LEVER
S302	1-552-570-00	s	SWITCH, LEVER
S303	1-552-570-00	s	SWITCH, LEVER
S305	1-570-836-11	s	SWITCH, SLIDE
S306	1-570-836-11	s	SWITCH, SLIDE
S307	1-570-847-11	s	SWITCH, SLIDE
S308	1-570-847-11	s	SWITCH, SLIDE
S309	1-552-539-00	s	SWITCH, KEY BOARD
S310	1-552-539-00	s	SWITCH, KEY BOARD
S311	1-552-539-00	s	SWITCH, KEY BOARD
S312	1-552-539-00	s	SWITCH, KEY BOARD
S313	1-570-847-11	s	SWITCH, SLIDE

SW-232 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	1-627-383-11	o	PRINTED CIRCUIT BOARD, SW-232
S601	1-516-961-00	s	SWITCH, LEVER SLIDE

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Part List".

KEY BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	1-466-018-11	o	KEY ASSY
1pc	1-574-038-11	s	CABLE ASSY, FLAT
SW1	1-570-308-21	s	SWITCH, MECH KEY
SW2	1-570-308-21	s	SWITCH, MECH KEY
SW3	1-570-308-21	s	SWITCH, MECH KEY
SW4	1-570-308-21	s	SWITCH, MECH KEY
SW5	1-570-308-21	s	SWITCH, MECH KEY
SW6	1-570-308-21	s	SWITCH, MECH KEY
SW7	1-570-308-21	s	SWITCH, MECH KEY
SW8	1-570-308-21	s	SWITCH, MECH KEY
SW9	1-570-308-21	s	SWITCH, MECH KEY
SW10	1-570-308-11	s	SWITCH, MECH KEY
SW11	1-570-308-11	s	SWITCH, MECH KEY
SW12	1-570-308-21	s	SWITCH, MECH KEY
SW13	1-570-308-21	s	SWITCH, MECH KEY
SW14	1-570-308-21	s	SWITCH, MECH KEY
SW15	1-570-308-21	s	SWITCH, MECH KEY
SW16	1-570-308-21	s	SWITCH, MECH KEY
SW17	1-570-308-21	s	SWITCH, MECH KEY
SW18	1-570-308-21	s	SWITCH, MECH KEY
SW19	1-570-308-21	s	SWITCH, MECH KEY
SW20	1-570-308-21	s	SWITCH, MECH KEY
SW21	1-570-308-21	s	SWITCH, MECH KEY
SW22	1-570-308-21	s	SWITCH, MECH KEY
SW23	1-570-308-21	s	SWITCH, MECH KEY
SW24	1-570-308-11	s	SWITCH, MECH KEY
SW25	1-570-308-11	s	SWITCH, MECH KEY
SW26	1-570-308-21	s	SWITCH, MECH KEY
SW27	1-570-308-11	s	SWITCH, MECH KEY
SW28	1-570-308-11	s	SWITCH, MECH KEY
SW29	1-570-308-21	s	SWITCH, MECH KEY
SW30	1-570-308-11	s	SWITCH, MECH KEY
SW31	1-570-308-11	s	SWITCH, MECH KEY
SW32	1-570-308-21	s	SWITCH, MECH KEY
SW33	1-570-308-21	s	SWITCH, MECH KEY
SW34	1-570-308-21	s	SWITCH, MECH KEY
SW35	1-570-308-21	s	SWITCH, MECH KEY
SW36	1-570-308-21	s	SWITCH, MECH KEY
SW37	1-570-308-21	s	SWITCH, MECH KEY
SW38	1-570-308-21	s	SWITCH, MECH KEY
SW39	1-570-308-21	s	SWITCH, MECH KEY
SW40	1-570-308-21	s	SWITCH, MECH KEY
SW41	1-570-308-21	s	SWITCH, MECH KEY
SW42	1-570-308-21	s	SWITCH, MECH KEY
SW43	1-570-308-11	s	SWITCH, MECH KEY
SW44	1-570-308-11	s	SWITCH, MECH KEY
SW45	1-570-308-11	s	SWITCH, MECH KEY
SW101	1-570-308-21	s	SWITCH, MECH KEY
SW102	1-570-308-21	s	SWITCH, MECH KEY
SW103	1-570-308-21	s	SWITCH, MECH KEY
SW104	1-570-308-21	s	SWITCH, MECH KEY
SW105	1-570-308-21	s	SWITCH, MECH KEY

Ref. No. or Q'ty	Part No.	SP	Description
SW106	1-570-308-21	s	SWITCH, MECH KEY
SW107	1-570-308-21	s	SWITCH, MECH KEY
SW108	1-570-308-21	s	SWITCH, MECH KEY
SW109	1-570-308-21	s	SWITCH, MECH KEY
SW110	1-570-308-21	s	SWITCH, MECH KEY
SW111	1-553-856-00	s	SWITCH, KEY BOARD
SW112	1-553-856-00	s	SWITCH, KEY BOARD
SW114	1-570-308-21	s	SWITCH, MECH KEY
SW115	1-570-308-21	s	SWITCH, MECH KEY
SW116	1-570-308-21	s	SWITCH, MECH KEY
SW117	1-570-308-21	s	SWITCH, MECH KEY
SW118	1-570-308-21	s	SWITCH, MECH KEY
SW119	1-570-308-21	s	SWITCH, MECH KEY
SW120	1-570-308-21	s	SWITCH, MECH KEY
SW121	1-570-308-21	s	SWITCH, MECH KEY
SW122	1-570-308-21	s	SWITCH, MECH KEY
SW123	1-570-308-21	s	SWITCH, MECH KEY
SW124	1-570-308-21	s	SWITCH, MECH KEY
SW125	1-570-308-21	s	SWITCH, MECH KEY
SW126	1-570-308-21	s	SWITCH, MECH KEY
SW127	1-570-308-21	s	SWITCH, MECH KEY
SW128	1-570-308-21	s	SWITCH, MECH KEY
SW129	1-570-308-21	s	SWITCH, MECH KEY
SW130	1-570-308-21	s	SWITCH, MECH KEY
D1	8-719-911-19	s	1SS119
D2	8-719-911-19	s	1SS119
D3	8-719-911-19	s	1SS119
D4	8-719-911-19	s	1SS119
D5	8-719-911-19	s	1SS119
D6	8-719-911-19	s	1SS119
D7	8-719-911-19	s	1SS119
D8	8-719-911-19	s	1SS119
D9	8-719-911-19	s	1SS119
D10	8-719-911-19	s	1SS119
D11	8-719-911-19	s	1SS119
D12	8-719-911-19	s	1SS119
D13	8-719-911-19	s	1SS119
D14	8-719-911-19	s	1SS119
D15	8-719-911-19	s	1SS119
D16	8-719-911-19	s	1SS119
D17	8-719-911-19	s	1SS119
D18	8-719-911-19	s	1SS119
D19	8-719-911-19	s	1SS119
D20	8-719-911-19	s	1SS119
D21	8-719-911-19	s	1SS119
D22	8-719-911-19	s	1SS119
D23	8-719-911-19	s	1SS119
D24	8-719-911-19	s	1SS119
D25	8-719-911-19	s	1SS119
D26	8-719-911-19	s	1SS119
D27	8-719-911-19	s	1SS119
D28	8-719-911-19	s	1SS119
D29	8-719-911-19	s	1SS119
D30	8-719-911-19	s	1SS119

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Part List".

Ref. No. or Q'ty	Part No.	SP	Description
D31	8-719-911-19	s	1SS119
D32	8-719-911-19	s	1SS119
D33	8-719-911-19	s	1SS119
D34	8-719-911-19	s	1SS119
D35	8-719-911-19	s	1SS119
D36	8-719-911-19	s	1SS119
D37	8-719-911-19	s	1SS119
D38	8-719-911-19	s	1SS119
D39	8-719-911-19	s	1SS119
D40	8-719-911-19	s	1SS119
D41	8-719-911-19	s	1SS119
D42	8-719-911-19	s	1SS119
D43	8-719-911-19	s	1SS119
D53	8-719-908-50	s	SLR-54MC3
D54	8-719-921-01	s	SLR-54VC3
D55	8-719-908-50	s	SLR-54MC3
D69	8-719-908-53	s	SLR-54DC3
D70	8-719-908-53	s	SLR-54DC3
D71	8-719-908-53	s	SLR-54DC3
D73	8-719-921-01	s	SLR-54VC3
D74	8-719-908-50	s	SLR-54MC3
D75	8-719-908-55	s	SLR-54YC3
D87	8-719-908-50	s	SLR-54MC3
D88	8-719-921-01	s	SLR-54VC3
D89	8-719-908-50	s	SLR-54MC3
D101	8-719-911-19	s	1SS119
D102	8-719-911-19	s	1SS119
D103	8-719-911-19	s	1SS119
D104	8-719-911-19	s	1SS119
D105	8-719-911-19	s	1SS119
D106	8-719-911-19	s	1SS119
D107	8-719-911-19	s	1SS119
D108	8-719-911-19	s	1SS119
D109	8-719-911-19	s	1SS119
D110	8-719-911-19	s	1SS119
D111	8-719-911-19	s	1SS119
D112	8-719-911-19	s	1SS119
D114	8-719-911-19	s	1SS119
D115	8-719-911-19	s	1SS119
D116	8-719-911-19	s	1SS119
D117	8-719-911-19	s	1SS119
D118	8-719-911-19	s	1SS119
D119	8-719-911-19	s	1SS119
D120	8-719-911-19	s	1SS119
D121	8-719-911-19	s	1SS119
D122	8-719-911-19	s	1SS119
D123	8-719-911-19	s	1SS119
D124	8-719-911-19	s	1SS119
D125	8-719-911-19	s	1SS119
D126	8-719-911-19	s	1SS119
D127	8-719-911-19	s	1SS119
D128	8-719-911-19	s	1SS119
D129	8-719-911-19	s	1SS119
D130	8-719-911-19	s	1SS119
D141	8-719-917-23	s	SL-1172-C
D142	8-719-917-23	s	SL-1172-C

SWITCHING REGULATOR

Ref. No. or Q'ty	Part No.	SP	Description
⚠ 1pc	1-413-371-11	s	SWITCHING REGULATOR (ZSSP741QA)
1pc	9-994-333-01	s	INLET, WITH FILTER, SUP-3G-E
S002	9-994-330-01	s	VOLTAGE SELECTOR, SDDJA1-1
BR(CB)001	1-532-545-51	s	BREAKER CIRCUIT
FN(M)801	1-541-524-11	s	MOTOR DC FAN
⚠S001	1-570-743-31	s	SWITCH, AC POWER
S101	9-994-332-01	s	THERMAL SWITCH, OHD3-85B

741-A BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	9-994-321-01	o	MOUNTED CIRCUIT BOARD, 741-A
⚠C001	1-136-185-00	s	METALIZED FILM 0.22MF 20%
C003	1-136-185-00	s	METALIZED FILM 0.22MF 20%
C004	1-162-168-00	s	CERAMIC 0.0033MF 10%
C006	1-161-741-00	s	CERAMIC 0.001MF 10%
C007	1-161-741-00	s	CERAMIC 0.001MF 10%
⚠C008	1-161-741-00	s	CERAMIC 0.001MF 10%
C009	9-994-372-01	s	LLK2E102MHSC 1000uF 250V
C010	9-994-372-01	s	LLK2E102MHSC 1000uF 250V
C020	9-994-373-01	s	QYX2A223JTP2CE 0.022 100V
C021	9-994-334-01	s	DE5127R102K2K 1000PF 2KV
C022	9-994-374-01	s	QYX2A473JTP2CE 0.047MF 100V
C023	9-994-375-01	s	UPF1E101MAH1FA 100MF 25V
C024	9-994-375-01	s	UPF1E101MAH1FA 100MF 25V
⚠C025	1-161-935-00	s	PENETRATION 4700pF 400V
C106	9-994-376-01	s	QYX2A222JTP2CE 2200PF 100V
C112	9-994-379-01	s	QYX2A102JTP2CE 1000PF 100V
C113	9-994-378-01	s	QYX2A333JTP2CE 0.033 100V
C114	9-994-380-01	s	QYX2A104JTP2CE 0.1 100V
C115	9-994-381-01	s	UPF1H100MAH1FA 10 100V
C116	9-994-378-01	s	QYX2A333JTP2CE 0.033 100V
C117	9-994-378-01	s	QYX2A333JTP2CE 0.033 100V
C404	9-994-380-01	s	QYX2A104JTP2CE 0.1 100V
C405	9-994-375-01	s	UPF1E101MAH1FA 100MF 25V
C407	9-994-377-01	s	QXJ2J223JTPT 0.022MF 630V
C502	9-994-380-01	s	QYX2A104JTP2CE 0.1 100V
C503	9-994-382-01	s	QYX2A103JTP2CE 0.01 100V
C504	9-994-382-01	s	QYX2A103JTP2CE 0.01 100V
C505	9-994-382-01	s	QYX2A103JTP2CE 0.01 100V
C506	9-994-375-01	s	UPF1E101MAH1FA 100MF 25V
C507	9-994-381-01	s	UPF1H100MAH1FA 10 100V

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Part List".

Ref. No. or Q'ty	Part No.	SP	Description
C604	9-994-380-01	s	QYX2A104JTP2CE 0.1 100V
C606	9-994-375-01	s	UPF1E101MAH1FA 100MF 25V
C607	9-994-377-01	s	QXJ2J223JTPT 0.022MF 630V
C702	9-994-380-01	s	QYX2A104JTP2CE 0.1 100V
C703	9-994-375-01	s	UPF1E101MAH1FA 100MF 25V
C801	9-994-383-01	s	UPL1V331MPH1CA 330uF 35V
C802	9-994-384-01	s	UPF1V820MAH1FA 82uF 35V
CN2	9-994-345-01	o	B7PS-VH
CN4	9-994-346-01	o	IL-2P-S3EN2
CN7	9-994-347-01	o	5267-02A
⚠ D001	8-719-500-16	s	D5SB60
D008	9-994-338-01	s	RG1C
D009	9-994-339-01	s	1SS178
D010	8-719-951-30	s	ERA91-02
D011	8-719-101-59	s	RD5.6EL3
D110	8-719-812-41	s	TLR124
D111	9-994-339-01	s	1SS178
D202	8-719-920-31	s	ERA15-01
D302	8-719-920-31	s	ERA15-01
D402	8-719-920-31	s	ERA15-01
D403	8-719-981-01	s	ERA81-004
D502	9-994-339-01	s	1SS178
D503	8-719-920-31	s	ERA15-01
D504	9-994-339-01	s	1SS178
D505	8-719-981-01	s	ERA81-004
D506	9-994-339-01	s	1SS178
D602	8-719-920-31	s	ERA15-01
D603	8-719-981-01	s	ERA81-004
D702	8-719-920-31	s	ERA15-01
D703	8-719-981-01	s	ERA81-004
D801	9-994-340-01	s	ERB93-02E
D802	8-719-941-74	s	ERB91-02
⚠ FR001	9-994-343-01	s	MEG05N120JU115
IC101	8-759-937-59	s	MB3759
IC201	9-994-915-01	s	UPC7815HF
IC301	9-994-916-01	s	UPC79M15HF
IC401	8-749-931-22	s	SI-3122V
IC501	8-759-135-80	s	UPC358C
IC601	8-759-602-78	s	M5236L
IC701	9-994-917-01	s	UPC7908HF
IC801	9-994-918-01	s	UPC7912HF
IP(PS)501	1-532-605-11	s	LINC, IC
⚠ L001	9-994-342-01	s	SE25H-30020B

Ref. No. or Q'ty	Part No.	SP	Description
Q001	9-994-335-01	s	2SC3148
Q002	8-729-281-52	s	2SC1815Y
Q103	8-729-201-52	s	2SA1015Y
Q104	8-729-201-52	s	2SA1015Y
Q105	8-729-281-52	s	2SC1815Y
Q501	9-994-336-01	s	2SC3710Y
Q502	8-729-201-52	s	2SA1015Y
Q503	8-729-201-52	s	2SA1015Y
Q601	9-994-337-01	s	2SB1018Y
⚠ R001	9-994-912-01	s	METAL FILM 1/2W 470K
R002	1-247-752-11	s	CARBON 2W 1K 5%
R005	9-994-913-01	s	METAL OXIDE FILM 2W 5% 82K
R006	9-994-913-01	s	METAL OXIDE FILM 2W 5% 82K
R014	1-121-958-11	s	FUSE 1/2W 10
R015	9-994-369-01	s	FILM 2W 330
⚠ R016	1-249-417-11	s	CARBON 1/6W 1K 5%
R017	9-994-370-01	s	FILM, 1/2W 1.8
⚠ R018	1-249-405-11	s	1/4W 100 5%
R019	1-249-417-11	s	CARBON 1/6W 1K 5%
⚠ R020	1-247-742-11	s	CARBON 1/2W 5% 180
R021	1-249-494-11	s	CARBON 1/2W 5% 68K
R022	1-249-417-11	s	CARBON 1/6W 1K 5%
R105	9-994-369-01	s	FILM, 2W 330
⚠ R506	9-994-914-01	s	METAL OXIDE FILM 2W 5% 82
⚠ R507	9-994-914-01	s	METAL OXIDE FILM 2W 5% 82
R515	9-994-371-01	s	FILM, 1/2W 2700
R516	9-994-371-01	s	FILM, 1/2W 2700
T001	9-994-341-01	s	N-T00-317
⚠ TR001	9-994-344-01	s	BCR8PM-12L1
VR(RV)101	1-226-772-11	s	RES, VAR METAL GLAZE 4.7K
VR(RV)102	1-226-772-11	s	RES, VAR METAL GLAZE 4.7K
VR(RV)501	1-226-772-11	s	RES, VAR METAL GLAZE 4.7K
VR(RV)601	1-230-626-61	s	RES, VAR CARBON 470

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Part List".

741-B BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	9-994-322-01	o	MOUNTED CITRCUIT BOARD, 741-B
C012	9-994-395-01	s	QYX2A333JTP2CE 0.033uF 100V
C014	9-994-395-01	s	QYX2A333JTP2CE 0.033uF 100V
C015	9-994-350-01	s	C7NP2E105J 1uF 250V
C016	9-994-350-01	s	C7NP2E105J 1uF 250V
C017	9-994-351-01	s	DE5130R222K1K 2200pF 1000V
C018	9-994-351-01	s	DE5130R222K1K 2200pF 1000V
C019	1-161-953-12	s	PENETRATION 4700pF 400V
C101	9-994-352-01	s	DE51-0C222K500 2200pF 500V
C102	9-994-352-01	s	DE51-0C222K500 2200pF 500V
C103	9-994-352-01	s	DE51-0C222K500 2200pF 500V
C104	9-994-352-01	s	DE51-0C222K500 2200pF 500V
C105	9-994-393-01	s	UPL1A332MRH6CA 3300uF 10V
C107	9-994-404-01	s	UPL1A102MRH6CA 1000uF 10V
C108	9-994-394-01	s	QXJ2J223JTPT 0.022uF 630V
C109	9-994-394-01	s	QXJ2J223JTPT 0.022uF 630V
C110	9-994-395-01	s	QYX2A333JTP2CE 0.033uF 100V
C111	9-994-396-01	s	UPF1V221MPHIFA 220uF 35V
C201	9-994-397-01	s	DE50-8C102K500 1000pF 500V
C202	9-994-397-01	s	DE50-8C102K500 1000pF 500V
C203	9-994-396-01	s	UPF1V221MPHIFA 220uF 35V
C204	9-994-398-01	s	UPF1E151MPHIFA 150uF 25V
C301	9-994-396-01	s	UPF1V221MPHIFA 220uF 35V
C302	9-994-398-01	s	UPF1E151MPHIFA 150uF 25V
C401	9-994-397-01	s	DE50-8C102K500 1000pF 500V
C402	9-994-397-01	s	DE50-8C102K500 1000pF 500V
C403	9-994-399-01	s	UPF1V391MPHICA 390uF 35V
C406	9-994-394-01	s	QXJ2J223JTPT 0.022uF 630V
C501	9-994-399-01	s	UPF1V391MPHICA 390uF 35V
C601	9-994-397-01	s	DE50-8C102K500 1000pF 500V
C602	9-994-397-01	s	DE50-8C102K500 1000pF 500V
C603	9-994-400-01	s	UPF1E471MPHICA 470uF 25V
C701	9-994-400-01	s	UPF1E471MPHICA 470uF 25V
CN1	1-564-607-11	o	PIN CONNECTOR 6P
CN3	9-994-366-01	o	5289-5A
CN5	9-994-367-01	o	5267-12A
CN6	9-994-368-01	o	5267-09A
D002	9-994-353-01	s	ERB38-06G1
D003	8-719-981-01	s	ERA81-004
D004	8-719-941-74	s	ERB91-02
D005	9-994-353-01	s	ERB38-06G1
D006	8-719-981-01	s	ERA81-004
D007	8-719-941-74	s	ERB91-02
D101	9-994-355-01	s	D10SC6M
D102	8-719-941-74	s	ERB91-02
D103	8-719-941-74	s	ERB91-02
D104	9-994-339-01	s	1SS178
D105	9-994-339-01	s	1SS178
D106	9-994-339-01	s	1SS178
D107	9-994-339-01	s	1SS178
D108	8-719-109-89	s	RD5.6ESB2
D109	9-994-339-01	s	1SS178
D112	8-719-920-31	s	ERA15-01
D201	8-719-500-67	s	D5KC40H
D203	8-719-920-31	s	ERA15-01
D204	8-719-110-67	s	RD27ESB2
D205	9-994-339-01	s	1SS178

Ref. No. or Q'ty	Part No.	SP	Description
D301	9-994-356-01	s	D5KC40RH
D303	8-719-920-31	s	ERA15-01
D401	9-994-357-01	s	ESAC33M-02C
D501	9-994-358-01	s	ESAC33M-02N
D601	9-994-357-01	s	ESAC33M-02C
D701	9-994-358-01	s	ESAC33M-02N
L101	9-994-362-01	s	C-L00-168
L102	9-994-363-01	s	RD1113A3J
L201	9-994-364-01	s	C-L00-169
L401	9-994-365-01	s	C-L00-170
L601	9-994-365-01	s	C-L00-170
Q003	9-994-401-01	s	2SC3318-08
Q004	9-994-401-01	s	2SC3318-08
Q101	8-729-202-45	s	2SA1020Y
Q102	8-729-202-45	s	2SA1020Y
⚠R003	9-994-385-01	s	METAL OXIDE 3W 100 5%
R004	9-994-385-01	s	METAL OXIDE 3W 100 5%
R007	9-994-386-01	s	METAL OXIDE 3W 2.7 5%
R008	1-247-688-11	s	CARBON 1/4W 10 5%
R009	1-249-482-11	s	CARBON 1/2W 4.7 5%
⚠R010	9-994-386-01	s	METAL OXIDE 3W 2.7 5%
R011	1-247-688-11	s	CARBON 1/4W 10 5%
R012	1-249-482-11	s	CARBON 1/2W 4.7 5%
R013	9-994-387-01	s	CEMENT, 5W 47 5%
⚠R101	9-994-388-01	s	METAL OXIDE 2W 10 5%
⚠R102	9-994-388-01	s	METAL OXIDE 2W 10 5%
R103	9-994-349-01	s	LM30042-11 2W 0.012 5%
⚠R108	9-994-389-01	s	METAL OXIDE 2W 1K 5%
R114	1-212-873-11	s	RES, FUSE 47 1/4W 5%
R115	1-212-873-11	s	RES, FUSE 47 1/4W 5%
⚠R201	9-994-390-01	s	METAL OXIDE 1W 22 5%
R202	9-994-391-01	s	METAL OXIDE 3W 1500 5%
R301	9-994-391-01	s	METAL OXIDE 3W 1500 5%
R401	9-994-390-01	s	METAL OXIDE 1W 22 5%
R402	9-994-392-01	s	METAL OXIDE 3W 1 5%
⚠R501	9-994-392-01	s	METAL OXIDE 3W 1 5%
R601	9-994-390-01	s	METAL OXIDE 1W 22 5%
R602	9-994-392-01	s	METAL OXIDE 3W 1 5%
R701	9-994-392-01	s	METAL OXIDE 3W 1 5%
T002	9-994-359-01	s	N-T00-318
T003	9-994-360-01	s	D-T00-057
T004	9-994-360-01	s	D-T00-057
T005	9-994-361-01	s	N-T00-328

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Part List".

9-4. PACKING MATERIAL AND ACCESSORIES

Ref. No. or Q'ty	Part No.	SP	Description
⚠1pc	1-534-754-00	s	CORD, POWER (FOR J)
1pc	1-551-812-00	s	CORD, POWER (FOR UC)
1pc	1-556-760-00	s	CORD, POWER (FOR EK)
1pc	1-558-592-11	s	CORD, CONNECTION 15P
1pc	2-990-242-01	o	HOLDER (B), PLUG

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Part List".